Appendix B:
Water Quality Data By Watershed

Date	Temp (C)	Field SC (umhos)	pH	DO (mg/L)	Total Coli MPN	E. Coli MPN	Turb (ntu)	TSS (mg/L)	TOC (mg/L)	48H Cerio		96H Fathead		96H Algae Growth		Partial Minerals (mg/L)						Total Trace Elements (ug/L)							
										Result	Control	Result	Control	Result	Control	B	Cl	SO_4	Ca	Mg	Hard	As	Cd	Cr	Cu	Pb	Ni	Zn	Hg
FARMINGTON DRAINAGE AREA																													
STC212	**Littlejohn's Creek @ Sonora Road**																												
02/18/03	13	485.0	7.9	11.7	866	192	1.4																						
03/06/03	15	505.0	7.8	11.1	162	96	1.0																						
03/19/03	15	545.0	7.7	10.7	1733	816	1.7	<5.0	6.0							0.81	31.0	130.0	35.0	25.0	190	<4.0	<0.1	<1.0	1.7	<5.0	<5.0	<2.0	<0.2
04/01/03	15	109.0	7.8	9.3	285	138	1.4	<4.0	1.5																				
04/15/03	20	203.0	8.0	10.4	345	162	1.1	<4.0	2.9							0.19	7.3	19.0	15.0	8.9	74	<4.0	<0.1	<1.0	1.3	<5.0	<5.0	<2.0	<0.2
05/07/03	24	220.0	7.8	9.1	1414	124	0.5	NA	3.2																				
05/20/03	26	201.0	7.7	9.2	1733	326	1.3	<4.0	3.0							0.14	NA	NA	14.0	8.8	71	4.0	<0.1	<1.0	1.0	<5.0	<5.0	<2.0	<0.2
06/03/03	30	162.0	7.9	8.2	>2420	1414	3.1	<4.0	5.9																				
06/18/03	26	139.0	7.8	9.1	>2420	116	1.1	<4.0	2.9							0.10	2.9	4.1	11.0	6.4	54	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
06/30/03	27	125.0	7.8	8.8	>2420	123	1.2	<4.0	3.1							0.07	2.7	3.3	10.0	5.5	48	6.8	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
07/22/03	28	102.0	7.6	7.3	>2420	25	1.7																						
08/06/03	26	98.0	7.6	7.7	2420	36	3.2																						
08/19/03	26	101.0	7.5	8.5	2420	13	1.3																						
09/10/03	24	105.0	7.6	8.1	1986	54	1.6																						
09/24/03	24	108.0	7.6	9.0	1414	9	0.8																						
10/08/03	23	108.0	7.6	9.4	>2420	457	1.1																						
10/22/03	20	110.0	7.6	11.8	1986	201	0.5																						
11/05/03	14	116.0	7.8	11.2	2420	435	1.1																						
11/19/03	15	109.0	7.6	10.4	>2420	2420	4.4																						
01/07/04	8	474.0	7.8	14.6	1120	101	1.5																						
01/20/04	9	505.0	8.0	13.5	1414	130	1.0																						
02/04/04	9	313.0	7.9	14.8	>2420	>2420	17.7																						
02/18/04	12	235.0	7.8	14.4	>2420	>2420	44.0																						
03/03/04	11	232.0	8.0	11.9	1733	236	NA																						
03/17/04	21	326.0	7.9	9.5	>2420	1553	2.4																						
Count	**25**	**25**	**25**	**25**	**25**	**25**	**24**	**7**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**4**	**4**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**8**	**98.0**	**7.5**	**7.3**	**162**	**9**	**0.5**	**<4.0**	**1.5**							**0.07**	**2.7**	**3.3**	**10.0**	**5.5**	**48**	**<4.0**	**<0.1**	**<1.0**	**<1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**19**	**229.4**	**7.8**	**10.4**	**1838**	**567**	**4.0**	**2.1**	**3.6**							**0.26**	**11.0**	**39.1**	**17.0**	**10.9**	**87**	**3.4**	**<0.1**	**<1.0**	**1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Median	**20**	**162.0**	**7.8**	**9.5**	**1986**	**162**	**1.4**	**<4.0**	**3.1**							**0.14**	**5.1**	**11.6**	**14.0**	**8.8**	**71**	**2.0**	**<0.1**	**<1.0**	**1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Max	**30**	**545.0**	**8.0**	**14.8**	**>2420**	**>2420**	**44.0**	**<5.0**	**6.0**							**0.81**	**31.0**	**130.0**	**35.0**	**25.0**	**190**	**6.8**	**<0.1**	**<1.0**	**1.7**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q1	**14**	**109.0**	**7.6**	**9.0**	**1414**	**101**	**1.1**	**2.0**	**2.9**							**0.10**	**2.9**	**3.9**	**11.0**	**6.4**	**54**	**2.0**	**<0.1**	**<1.0**	**0.5**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q3	**26**	**313.0**	**7.9**	**11.7**	**2500**	**457**	**1.9**	**2.0**	**3.9**							**0.19**	**13.2**	**46.8**	**15.0**	**8.9**	**74**	**4.0**	**<0.1**	**<1.0**	**1.3**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
SJC201	**Duck Creek @ Highway 4**																												
01/21/03	8.5	116.0	7.6	12.2	>2420	15	51.5																						
02/05/03	DRY	DRY	DRY	DRY	DRY	DRY	DRY																						
02/19/03	DRY	DRY	DRY	DRY	DRY	DRY	DRY																						
03/05/03	DRY	DRY	DRY	DRY	DRY	DRY	DRY																						
03/18/03	19	171.0	8.0	10.8	>2420	1203	71.6	4.4	6.3							<0.05	7.3	10.0	13.0	6.1	58	<4.0	<0.1	2.7	7.4	<5.0	<5.0	8.2	<0.2
04/02/03	NF	NF	NF	NF	NF	NF	NF																						
04/16/03	DRY	DRY	DRY	DRY	DRY	DRY	DRY																						
05/06/03	24	193.0	7.6	9.5	>2420	>2420	192.0	NA	10.0																				
05/21/03	25	123.0	7.8	7.9	>2420	74	33.8	NA	5.1							<0.05	4.1	4.6	11.0	5.0	47	<4.0	<0.1	1.8	5.2	<5.0	<5.0	4.5	<0.2
06/04/03	24	106.0	7.5	5.9	>2420	70	42.8	19.0	4.7																				
06/17/03	24	107.0	7.4	6.7	>2420	10	37.2	16.0	4.1							<0.05	4.2	4.0	10.0	4.3	43	<4.0	<0.1	<1.0	2.8	<5.0	<5.0	3.2	<0.2
06/30/03	25	97.0	7.4	7.7	>2420	192	46.6	33.0	3.9							<0.05	3.6	3.2	9.4	4.1	40	<4.0	<0.1	<1.0	3.2	<5.0	<5.0	4.7	<0.2
07/22/03	27	131.0	7.3	6.6	>2420	26	78.7																						
08/06/03	24	106.0	7.4	7.3	>2420	101	54.7																						
08/19/03	24	116.0	7.3	8.6	>2420	178	37.3																						
09/10/03	22	97.0	7.4	7.9	>2420	135	47.1																						
09/24/03	23	117.0	7.4	8.0	>2420	91	48.6																						
10/08/03	NA	NA	NA	NA	NA	NA	NA																						
10/22/03	DRY	DRY	DRY	DRY	DRY	DRY	DRY																						
11/05/03	DRY	DRY	DRY	DRY	DRY	DRY	DRY																						
11/19/03	DRY	DRY	DRY	DRY	DRY	DRY	DRY																						
01/07/04	10	106.0	7.8	13.5	>2420	378	72.0																						
Count	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**4**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**
Min	**8.5**	**97.0**	**7.3**	**5.9**	**>2420**	**10**	**33.8**	**4.4**	**3.9**							**<0.05**	**3.6**	**3.2**	**9.4**	**4.1**	**40**	**<4.0**	**<0.1**	**<0.1**	**2.8**	**<5.0**	**<5.0**	**3.2**	**<0.2**
Mean	**21**	**122.0**	**7.5**	**8.7**	**>2420**	**383**	**62.6**	**18.1**	**5.6**							**<0.05**	**4.8**	**5.5**	**10.9**	**4.9**	**47**	**<4.0**	**<0.1**	**1.4**	**4.7**	**<5.0**	**<5.0**	**5.2**	**<0.2**
Median	**24**	**116.0**	**7.4**	**7.9**	**>2420**	**101**	**48.6**	**17.5**	**4.7**							**<0.05**	**4.2**	**4.3**	**10.5**	**4.7**	**45**	**<4.0**	**<0.1**	**1.2**	**4.2**	**<5.0**	**<5.0**	**4.6**	**<0.2**
Max	**27**	**193.0**	**8.0**	**13.5**	**>2420**	**>2420**	**192.0**	**33.0**	**10.0**							**<0.05**	**7.3**	**10.0**	**13.0**	**6.1**	**58**	**<4.0**	**<0.1**	**2.7**	**7.4**	**<5.0**	**<5.0**	**8.2**	**<0.2**
Q1	**22**	**106.0**	**7.4**	**7.3**	**>2420**	**70**	**42.8**	**13.1**	**4.1**							**<0.05**	**4.0**	**3.8**	**9.9**	**4.3**	**42**	**<4.0**	**<0.1**	**0.5**	**3.1**	**<5.0**	**<5.0**	**4.2**	**<0.2**
Q3	**24**	**123.0**	**7.6**	**9.5**	**>2420**	**192**	**71.6**	**22.5**	**5.1**							**<0.05**	**5.0**	**6.0**	**11.5**	**5.3**	**50**	**<4.0**	**<0.1**	**2.0**	**5.8**	**<5.0**	**<5.0**	**5.6**	**<0.2**

NA: Sample was planned for collection, however it was unacceptable (possible QA/QC issue or equipment failure) NF: No Flow *: Significant difference from laboratory control MDD: Minimum Detectable Difference

										48H Cerio		96H Fathead		96H Algae Growth		Partial Minerals (mg/L)						Total Trace Elements (ug/L)							
Date	Temp (C)	Field SC (umhos)	pH	DO (mg/L)	Total Coli MPN	E. Coli MPN	Turb (ntu)	TSS (mg/L)	TOC (mg/L)	Result	Control	Result	Control	Result	Control	B	Cl	SO_4	Ca	Mg	Hard	As	Cd	Cr	Cu	Pb	Ni	Zn	Hg
SJC213	**Littlejohn's Creek @ Austin Road**																												
03/05/03	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
03/18/03	18	237.0	8.0	10.8	>2420	866	40.4	30.0	NA							0.18	11.0	33.0	17.0	10.0	85	<4.0	<0.1	1.3	4.3	<5.0	<5.0	5.0	<0.2
04/02/03	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
04/16/03	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
05/06/03	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
05/21/03	29	614.0	8.2	14.6	>2420	276	17.7	NA								0.16	36.0	35.0	54.0	29.0	250	<4.0	<0.1	1.6	7.9	<5.0	<5.0	5.6	<0.2
06/04/03	20	280.0	7.3	7.0	>2420	>2420	43.5	45.0	29.0																				
06/17/03	20	204.0	7.2	8.6	>2420	139	17.9	NA	17.0							0.07	5.7	4.0	17.0	9.2	80	<4.0	<0.1	<1.0	6.5	<5.0	<5.0	6.3	<0.2
06/30/03	20	414.0	7.5	3.7	>2420	649	16.4	15.0	6.6							0.10	25.0	23.0	40.0	20.0	180	<4.0	<0.1	<1.0	3.6	<5.0	<5.0	<2.0	<0.2
07/23/03	26	91.0	7.8	8.8	>2420	93	44.9																						
08/05/03	23	113.0	7.3	7.4	>2420	96	79.2																						
08/20/03	21	116.0	7.3	5.8	>2420	2420	94.9																						
09/09/03	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
09/22/03	25	152.0	7.6	8.2	>2420	40	33.7																						
10/07/03	NF	NF	NF	NF	NF	NF	NF																						
10/21/03	NF	NF	NF	NF	NF	NF	NF																						
11/04/03	NF	NF	NF	NF	NF	NF	NF																						
11/17/03	NF	NF	NF	NF	NF	NF	NF																						
01/06/04	6	207.0	7.6	9.8	>2420	816	36.9																						
01/20/04	8	274.0	7.5	12.6	>2420	30	30.2																						
02/04/04	10	307.0	8.6	16.4	>2420	40	27.8																						
02/18/04	11	269.0	7.5	11.6	>2420	112	86.1																						
03/03/04	11	168.0	9.7	10.7	>2420	>2420	NA																						
03/17/04	17	221.0	7.6	8.6	1553	99	45.7																						
Count	**15**	**15**	**15**	**15**	**15**	**15**	**14**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**
Min	**6**	**91.0**	**7.2**	**3.7**	**1553**	**30**	**16.4**	**15.0**	**6.6**							**0.07**	**5.7**	**4.0**	**17.0**	**9.2**	**80**	**<4.0**	**<0.1**	**<1.0**	**3.6**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**18**	**244.5**	**7.8**	**9.6**	**2437**	**712**	**44.0**	**30.0**	**17.5**							**0.13**	**19.4**	**23.8**	**32.0**	**17.1**	**149**	**<4.0**	**<0.1**	**1.0**	**5.6**	**<5.0**	**<5.0**	**4.5**	**<0.2**
Median	**20**	**221.0**	**7.6**	**8.8**	**>2420**	**139**	**38.7**	**30.0**	**17.0**							**0.13**	**18.0**	**28.0**	**28.5**	**15.0**	**133**	**<4.0**	**<0.1**	**0.9**	**5.4**	**<5.0**	**<5.0**	**5.3**	**<0.2**
Max	**29**	**614.0**	**9.7**	**16.4**	**>2420**	**>2420**	**94.9**	**45.0**	**29.0**							**0.18**	**36.0**	**35.0**	**54.0**	**29.0**	**250**	**<4.0**	**<0.1**	**1.6**	**7.9**	**<5.0**	**<5.0**	**6.3**	**<0.2**
Q1	**11**	**160.0**	**7.4**	**7.8**	**2500**	**95**	**28.4**	**22.5**	**11.8**							**0.09**	**9.7**	**18.3**	**17.0**	**9.8**	**84**	**<4.0**	**<0.1**	**0.5**	**4.1**	**<5.0**	**<5.0**	**4.0**	**<0.2**
Q3	**22**	**277.0**	**7.9**	**11.2**	**2500**	**841**	**45.5**	**37.5**	**23.0**							**0.17**	**27.8**	**33.5**	**43.5**	**22.3**	**198**	**<4.0**	**<0.1**	**1.4**	**6.9**	**<5.0**	**<5.0**	**5.8**	**<0.2**
SJC503	**Lone Tree Creek @ Austin Road**																												
01/21/03	NA	NA	NA	NA	NA	NA	NA																						
01/23/03	14	450.0	7.6	5.8	>2420	106	63.7																						
01/29/03	9	404.0	7.4	6.1			52.5																						
02/05/03	9	509.0	7.1	6.1	>2420	488	25.8																						
02/19/03	11	520.0	9.0	18.5	>2420	411	26.0																						
03/05/03	16	87.0	8.4	12.5	>2420	313	37.1																						
03/18/03	19	147.0	9.3	14.4	>2420	135	34.8	26.0	NA							<0.05	6.4	5.3	11.0	4.8	47	<4.0	<0.1	1.6	7.8	<5.0	<5.0	9.3	<0.2
04/02/03	14	112.0	7.8	10.8	>2420	866	48.6	38.0	4.2																				
04/16/03	17	320.0	7.7	8.6	>2420	>2420	45.6	33.0	8.9							0.07	8.4	9.2	28.0	12.0	120	<4.0	<0.1	1.7	14.0	<5.0	<5.0	14.0	<0.2
05/06/03	20	109.0	7.7	9.6	>2420	435	30.2	NA	5.6																				
05/21/03	23	186.0	7.5	8.4	>2420	>2420	55.7	NA	6.9							<0.05	5.5	6.3	16.0	7.1	68	<4.0	<0.1	2.5	6.6	<5.0	<5.0	8.3	<0.2
06/04/03	22	200.0	7.4	6.5	>2420	2420	58.5	57.0	11.0																				
06/17/03	21	193.0	7.4	7.3	>2420	980	41.4	36.0	7.3							<0.05	5.6	5.6	18.0	7.3	74	<4.0	<0.1	1.4	4.7	<5.0	<5.0	6.6	<0.2
06/30/03	21	116.0	7.5	7.0	>2420	285	26.0	NA	4.4							<0.05	3.6	4.2	11.0	4.3	46	<4.0	<0.1	<1.0	3.5	<5.0	<5.0	6.7	<0.2
07/23/03	25	200.0	7.5	7.0	>2420	>2420	34.8																						
08/05/03	21	119.0	7.3	8.7	>2420	219	64.4																						
08/20/03	21	164.0	7.3	6.5	>2420	78	52.0																						
09/09/03	20	94.0	7.4	8.4	>2420	167	42.9																						
09/22/03	21	148.0	7.4	8.4	>2420	162	37.3																						
10/07/03	20	124.0	7.5	8.0	>2420	1553	56.3																						
10/21/03	22	375.0	7.7	11.2	>2420	2420	47.8																						
11/04/03	NF	NF	NF	NF	NF	NF	NF																						
11/17/03	NF	NF	NF	NF	NF	NF	NF																						
01/06/04	5	297.0	7.6	10.3	>2420	1203	77.6																						
01/28/04	NA	NA	NA	NA	NA	NA	NA																						
02/24/04	16	461.0	7.8	9.8	>2420	435	NA																						
03/24/04	16	119.0	7.6	9.9	>2420	816	50.1																						
Count	**23**	**23**	**23**	**23**	**22**	**22**	**22**	**5**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**5**	**87.0**	**7.1**	**5.8**	**>2420**	**78**	**25.8**	**26.0**	**4.2**							**<0.05**	**3.6**	**4.2**	**11.0**	**4.3**	**46**	**<4.0**	**<0.1**	**<1.0**	**3.5**	**<5.0**	**<5.0**	**6.6**	**<0.2**
Mean	**18**	**237.1**	**7.7**	**9.1**	**>2420**	**954**	**45.9**	**38.0**	**6.9**							**0.03**	**5.9**	**6.1**	**16.8**	**7.1**	**71**	**<4.0**	**<0.1**	**1.5**	**7.3**	**<5.0**	**<5.0**	**9.0**	**<0.2**
Median	**20**	**186.0**	**7.5**	**8.4**	**>2420**	**462**	**46.7**	**36.0**	**6.9**							**<0.05**	**5.6**	**5.6**	**16.0**	**7.1**	**68**	**<4.0**	**<0.1**	**1.6**	**6.6**	**<5.0**	**<5.0**	**8.3**	**<0.2**
Max	**25**	**520.0**	**9.3**	**18.5**	**>2420**	**>2420**	**77.6**	**57.0**	**11.0**							**0.07**	**8.4**	**9.2**	**28.0**	**12.0**	**120**	**<4.0**	**<0.1**	**2.5**	**14.0**	**<5.0**	**<5.0**	**14.0**	**<0.2**
Q1	**15**	**119.0**	**7.4**	**7.0**	**>2420**	**236**	**35.4**	**33.0**	**5.0**							**0.03**	**5.5**	**5.3**	**11.0**	**4.8**	**47**	**<4.0**	**<0.1**	**1.4**	**4.7**	**<5.0**	**<5.0**	**6.7**	**<0.2**
Q3	**21**	**347.5**	**7.7**	**10.1**	**>2420**	**1466**	**54.9**	**38.0**	**8.1**							**0.03**	**6.4**	**6.3**	**18.0**	**7.3**	**74**	**<4.0**	**<0.1**	**1.7**	**7.8**	**<5.0**	**<5.0**	**9.3**	**<0.2**

NA: Sample was planned for collection, however it was unacceptable (possible QA/QC issue or equipment failure) NF: No Flow *: Significant difference from laboratory control MDD: Minimum Detectable Difference

Date	Temp (C)	Field SC (umhos)	pH	DO (mg/L)	Total Coli MPN	E. Coli MPN	Turb (ntu)	TSS (mg/L)	TOC (mg/L)	48H Cerio Result	48H Cerio Control	96H Fathead Result	96H Fathead Control	96H Algae Growth Result	96H Algae Growth Control	Partial Minerals (mg/L) B	Cl	SO_4	Ca	Mg	Hard	Total Trace Elements (ug/L) As	Cd	Cr	Cu	Pb	Ni	Zn	Hg
SJC504	**French Camp Slough @ Airport Way**																												
01/21/03	NA	NA	NA	NA	NA	NA	NA																						
01/23/03	13	304.0	8.4	11.3	1553	29	17.5																						
01/28/03	12	390.0	7.8	9.9			13.0																						
02/05/03	10	467.0	7.7	13.8	>2420	55	7.0																						
02/19/03	12	549.0	8.9	13.9	>2420	130	38.6																						
03/05/03	14	100.0	8.2	11.5	>2420	649	56.8																						
03/18/03	16	218.0	7.9	11.0	>2420	387	49.9	28.0	NA							0.15	9.9	28.0	16.0	9.6	80	<4.0	<0.1	2.1	5.6	<5.0	<5.0	7.4	<0.2
04/02/03	14	109.0	7.8	10.7	>2420	579	60.6	43.0	3.3																				
04/16/03	17	183.0	7.6	9.2	>2420	118	57.5	62.0	6.5							<0.05	4.5	6.0	16.0	7.1	70	<4.0	<0.1	1.5	5.5	<5.0	<5.0	8.0	<0.2
05/06/03	20	113.0	7.6	8.7	>2420	770	52.8	NA	5.5																				
05/21/03	24	116.0	7.5	8.4	>2420	816	46.0	NA	5.7							<0.05	3.9	4.4	9.6	4.4	42	<4.0	<0.1	2.8	6.5	<5.0	<5.0	8.8	<0.2
06/04/03	23	252.0	7.5	6.5	>2420	345	179.0	35.0	7.3																				
06/17/03	22	123.0	7.4	7.6	>2420	192	80.0	58.0	4.6							<0.05	4.4	5.1	13.0	5.7	56	<4.0	<0.1	2.4	4.9	<5.0	<5.0	8.0	<0.2
06/30/03	21	162.0	7.5	6.4	>2420	461	103.0	46.0	5.6							<0.05	5.3	6.0	15.0	6.4	64	<4.0	<0.1	<1.0	4.8	<5.0	<5.0	7.0	<0.2
07/23/03	25	153.0	7.5	5.8	>2420	238	58.8																						
08/05/03	21	135.0	7.5	7.5	>2420	261	72.2																						
08/20/03	21	160.0	7.4	6.3	>2420	38	70.8																						
09/09/03	20	112.0	7.5	8.3	>2420	111	78.0																						
09/22/03	22	134.0	7.4	8.0	>2420	91	46.9																						
10/07/03	20	98.0	7.6	8.5	>2420	2420	67.4																						
10/21/03	23	263.0	7.8	13.0	>2420	99	35.8																						
11/04/03	14	173.0	7.7	10.9	>2420	980	34.2																						
11/17/03	15	182.0	7.7	10.5	>2420	20	2.2																						
01/06/04	6	234.0	7.6	9.8	>2420	727	36.9																						
01/28/04	11	260.0	8.6	17.3	>2420	29	16.8																						
02/24/04	13	203.0	7.9	10.1	>2420	76	NA																						
03/24/04	16	127.0	7.7	9.8	727	308	57.0																						
Count	**26**	**26**	**26**	**26**	**25**	**25**	**25**	**6**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**6**	**98.0**	**7.4**	**5.8**	**727**	**20**	**2.2**	**28.0**	**3.3**							**<0.05**	**3.9**	**4.4**	**9.6**	**4.4**	**42**	**<4.0**	**<0.1**	**<1.0**	**4.8**	**<5.0**	**<5.0**	**7.0**	**<0.2**
Mean	**17**	**204.6**	**7.8**	**9.8**	**2391**	**397**	**53.5**	**45.3**	**5.5**							**0.05**	**5.6**	**9.9**	**13.9**	**6.6**	**62**	**<4.0**	**<0.1**	**1.9**	**5.5**	**<5.0**	**<5.0**	**7.8**	**<0.2**
Median	**17**	**167.5**	**7.7**	**9.8**	**>2420**	**238**	**52.8**	**44.5**	**5.6**							**0.03**	**4.5**	**6.0**	**15.0**	**6.4**	**64**	**<4.0**	**<0.1**	**2.1**	**5.5**	**<5.0**	**<5.0**	**8.0**	**<0.2**
Max	**25**	**549.0**	**8.9**	**17.3**	**>2420**	**2420**	**179.0**	**62.0**	**7.3**							**0.15**	**9.9**	**28.0**	**16.0**	**9.6**	**80**	**<4.0**	**<0.1**	**2.8**	**6.5**	**<5.0**	**<5.0**	**8.8**	**<0.2**
Q1	**13**	**124.0**	**7.5**	**8.0**	**2500**	**91**	**35.8**	**37.0**	**5.1**							**0.03**	**4.4**	**5.1**	**13.0**	**5.7**	**56**	**<4.0**	**<0.1**	**1.5**	**4.9**	**<5.0**	**<5.0**	**7.4**	**<0.2**
Q3	**21**	**247.5**	**7.8**	**11.0**	**2500**	**579**	**67.4**	**55.0**	**6.1**							**0.03**	**5.3**	**6.0**	**16.0**	**7.1**	**70**	**<4.0**	**<0.1**	**2.4**	**5.6**	**<5.0**	**<5.0**	**8.0**	**<0.2**
VALLEY FLOOR DRAINAGE TO SAN JOAQUIN RIVER																													
STC203	**MID Lateral 6/8 @ Dunn Road**																												
01/23/03	13	667.0	8.9	19.2	>2420	112	15.5																						
02/04/03	6	546.0	8.9	12.9	411	41	4.5																						
02/19/03	10	743.0	8.4	12.7	>2420	>2420	30.6																						
03/05/03	NF	NF	NF	NF	NF	NF	NF																						
03/18/03	15	233.0	8.5	11.3	>2420	91	11.5	6.8	NA							<0.05	30.0	5.7	16.0	6.6	67	<4.0	<0.1	<1.0	2.8	<5.0	<5.0	18.0	<0.2
04/02/03	16	217.0	8.0	10.8	2420	105	7.5	<4.0	2.2																				
04/16/03	17	196.0	8.0	10.3	2420	79	14.8	5.6	6.2							<0.05	11.0	9.3	18.0	7.9	78	<4.0	<0.1	<1.0	3.7	<5.0	<5.0	3.8	<0.2
05/06/03	20	235.0	8.4	10.9	>2420	147	6.3	NA	3.0																				
05/21/03	23	53.0	8.2	10.1	>2420	613	19.0	NA	3.5							<0.05	2.5	2.6	4.4	2.0	19	<4.0	<0.1	<1.0	2.9	<5.0	<5.0	3.9	<0.2
06/04/03	23	204.0	8.0	9.7	1986	199	13.1	12.0	3.8																				
06/17/03	23	212.0	7.6	9.8	>2420	68	14.7	8.4	2.8							<0.05	6.6	10.0	18.0	7.4	76	<4.0	<0.1	<1.0	1.3	<5.0	<5.0	2.9	<0.2
06/30/03	25	57.0	7.7	9.3	>2420	173	12.4	4.8	3.2							<0.05	2.8	2.5	4.9	1.9	20	<4.0	<0.1	<1.0	1.2	<5.0	<5.0	2.8	<0.2
07/23/03	27	62.0	8.0	7.5	1046	34	4.5																						
08/05/03	23	68.0	7.8	10.4	1733	28	9.6																						
08/20/03	24	69.0	7.9	8.4	2420	13	13.3																						
09/09/03	22	70.0	7.8	9.0	>2420	22	8.8																						
09/22/03	23	63.0	7.8	9.4	>2420	62	659.0																						
10/07/03	21	82.0	8.0	9.6	>2420	261	7.9																						
10/21/03	20	46.0	8.7	6.9	>2420	2	5.6																						
11/04/03	13	42.0	8.0	11.5	>2420	6	3.8																						
11/17/03	16	142.0	7.9	10.6	>2420	2	5.5																						
01/06/04	NF	NF	NF	NF	NF	NF	NF																						
Count	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**6**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**6**	**42.0**	**7.6**	**6.9**	**411**	**2**	**3.8**	**<4.0**	**2.2**							**<0.05**	**2.5**	**2.5**	**4.4**	**1.9**	**19**	**<4.0**	**<0.1**	**<1.0**	**1.2**	**<5.0**	**<5.0**	**2.8**	**<0.2**
Mean	**19**	**200.4**	**8.1**	**10.5**	**2247**	**228**	**43.4**	**6.6**	**3.5**							**<0.05**	**10.6**	**6.0**	**12.3**	**5.2**	**52**	**<4.0**	**<0.1**	**<1.0**	**2.4**	**<5.0**	**<5.0**	**6.3**	**<0.2**
Median	**21**	**112.0**	**8.0**	**10.2**	**>2420**	**74**	**10.6**	**6.2**	**3.2**							**<0.05**	**6.6**	**5.7**	**16.0**	**6.6**	**67**	**<4.0**	**<0.1**	**<1.0**	**2.8**	**<5.0**	**<5.0**	**3.8**	**<0.2**
Max	**27**	**743.0**	**8.9**	**19.2**	**>2420**	**>2420**	**659.0**	**12.0**	**6.2**							**<0.05**	**30.0**	**10.0**	**18.0**	**7.9**	**78**	**<4.0**	**<0.1**	**<1.0**	**3.7**	**<5.0**	**<5.0**	**18.0**	**<0.2**
Q1	**16**	**62.8**	**7.9**	**9.4**	**2420**	**27**	**6.1**	**5.0**	**2.9**							**<0.05**	**2.8**	**2.6**	**4.9**	**2.0**	**20**	**<4.0**	**<0.1**	**<1.0**	**1.3**	**<5.0**	**<5.0**	**2.9**	**<0.2**
Q3	**23**	**221.0**	**8.4**	**11.0**	**2500**	**154**	**14.7**	**8.0**	**3.7**							**<0.05**	**11.0**	**9.3**	**18.0**	**7.4**	**76**	**<4.0**	**<0.1**	**<1.0**	**2.9**	**<5.0**	**<5.0**	**3.9**	**<0.2**
STC202	**MID Main Drain Inlet to Miller Lake**																												
01/23/03	13	372.0	7.9	7.3	>2420	326	55.4																						
02/04/03	7	542.0	8.3	11.7	>2420	144	33.1																						
Count	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**0**	**0**							**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

NA: Sample was planned for collection, however it was unacceptable (possible QA/QC issue or equipment failure) NF: No Flow *: Significant difference from laboratory control MDD: Minimum Detectable Difference

Date	Temp (C)	Field SC (umhos)	pH	DO (mg/L)	Total Coli MPN	E. Coli MPN	Turb (ntu)	TSS (mg/L)	TOC (mg/L)	48H Cerio		96H Fathead		96H Algae Growth		Partial Minerals (mg/L)						Total Trace Elements (ug/L)							
										Result	Control	Result	Control	Result	Control	B	Cl	SO_4	Ca	Mg	Hard	As	Cd	Cr	Cu	Pb	Ni	Zn	Hg
STC211	**MID Main Drain @ Shoemake Road**																												
02/19/03	12	848.0	7.9	8.2	>2420	727	38.8																						
03/05/03	14	657.0	8.4	15.8	>2420	>2420	19.2																						
03/18/03	16	577.0	8.1	11.9	2420	68	4.1	6.0	NA							0.08	26.0	19.0	51.0	22.0	220	6.0	<0.1	1.2	1.4	<5.0	<5.0	<2.0	<0.2
04/02/03	14	362.0	7.5	3.6	>2420	>2420	27.0	14.0	9.7																				
04/16/03	17	354.0	7.5	6.6	>2420	1986	125.0	99.0	4.8							<0.05	13.0	13.0	30.0	14.0	130	<4.0	<0.1	3.2	6.8	<5.0	<5.0	18.0	<0.2
05/06/03	20	472.0	7.5	6.4	>2420	>2420	18.5	NA	13.0																				
05/21/03	21	734.0	7.3	0.4	>2420	>2420	135.0	NA	24.0							0.07	32.0	12.0	32.0	18.0	160	<4.0	<0.1	1.5	24.0	<5.0	<5.0	190.0	<0.2
06/04/03	21	358.0	7.2	1.8	>2420	>2420	9.2	9.5	42.0																				
06/17/03	24	262.0	7.0	1.1	>2420	>2420	125.0	15.0	11.0							0.06	12.0	9.2	19.0	9.0	86	<4.0	<0.1	<1.0	8.3	<5.0	<5.0	6.1	<0.2
06/30/03	25	255.0	7.3	3.6	>2420	>2420	29.7	20.0	8.9							<0.05	9.7	7.3	21.0	8.6	87	<4.0	<0.1	<1.0	5.4	<5.0	<5.0	8.2	<0.2
07/23/03	23	408.0	7.4	4.8	>2420	>2420	83.5																						
08/05/03	23	364.0	7.6	9.0	>2420	>2420	91.8																						
08/20/03	24	232.0	7.1	2.2	>2420	345	32.0																						
09/09/03	18	375.0	7.4	6.3	>2420	>2420	12.6																						
09/22/03	22	202.0	7.0	3.0	>2420	579	10.6																						
10/07/03	20	260.0	7.2	1.8	>2420	120	5.4																						
10/21/03	19	172.0	7.5	4.8	>2420	>2420	34.7																						
11/04/03	13	287.0	7.3	5.2	>2420	1553	60.0																						
11/17/03	14	405.0	7.7	8.2	>2420	37	21.8																						
01/06/04	6	431.0	7.3	5.4	>2420	>2420	117.0																						
01/20/04	9	727.0	7.4	6.0	1011	1553	94.3																						
02/04/04	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
02/18/04	12	460.0	7.6	11.8	>2420	>2420	298.0																						
03/03/04	10	357.0	7.7	10.0	>2420	228	NA																						
03/17/04	13	810.0	7.7	8.8	>2420	238	61.0																						
Count	**24**	**24**	**24**	**24**	**24**	**24**	**23**	**6**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**6**	**172.0**	**7.0**	**0.4**	**1011**	**37**	**4.1**	**6.0**	**4.8**							**<0.05**	**9.7**	**7.3**	**19.0**	**8.6**	**86**	**<4.0**	**<0.1**	**<1.0**	**1.4**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**17**	**432.0**	**7.5**	**6.1**	**1716**	**1669**	**63.2**	**27.3**	**16.2**							**0.05**	**18.5**	**12.1**	**30.6**	**14.3**	**137**	**2.8**	**<0.1**	**1.4**	**9.2**	**<5.0**	**<5.0**	**44.7**	**<0.2**
Median	**18**	**369.5**	**7.5**	**5.7**	**>2420**	**>2420**	**34.7**	**14.5**	**11.0**							**0.06**	**13.0**	**12.0**	**30.0**	**14.0**	**130**	**2.0**	**<0.1**	**1.2**	**6.8**	**<5.0**	**<5.0**	**8.2**	**<0.2**
Max	**25**	**848.0**	**8.4**	**15.8**	**>2420**	**>2420**	**298.0**	**99.0**	**42.0**							**0.08**	**32.0**	**19.0**	**51.0**	**22.0**	**220**	**6.0**	**<0.1**	**3.2**	**24.0**	**<5.0**	**<5.0**	**190.0**	**<0.2**
Q1	**13**	**280.8**	**7.3**	**3.4**	**2500**	**462**	**18.9**	**10.6**	**9.3**							**0.03**	**12.0**	**9.2**	**21.0**	**9.0**	**87**	**2.0**	**<0.1**	**0.5**	**5.4**	**<5.0**	**<5.0**	**6.1**	**<0.2**
Q3	**21**	**498.3**	**7.6**	**8.4**	**2500**	**2500**	**93.1**	**18.8**	**18.5**							**0.07**	**26.0**	**13.0**	**32.0**	**18.0**	**160**	**2.0**	**<0.1**	**1.5**	**8.3**	**<5.0**	**<5.0**	**18.0**	**<0.2**
STC204	**MID Lateral 3/4 @ Paradise Road**																												
01/23/03	17	638.0	8.5	19.6	866	93	1.5																						
02/04/03	NS	NS	NS	NS	NS	NS	NS																						
02/19/03	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
03/05/03	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
03/18/03	15	533.0	8.4	12.3	491	9	2.7	<4.0	NA							0.10	40.0	25.0	40.0	15.0	160	4.3	<0.1	<1.0	1.0	<5.0	<5.0	<2.0	<0.2
04/02/03	16	222.0	8.0	11.3	1120	36	8.5	<4.0	1.8																				
04/16/03	17	321.0	7.8	11.1	2420	20	7.2	<4.0	2.8							<0.05	17.0	15.0	24.0	8.4	94	<4.0	<0.1	<1.0	2.5	<5.0	<5.0	<2.0	<0.2
05/06/03	19	581.0	8.1	11.5	980	30	3.1	NA	3.6																				
05/21/03	22	241.0	8.0	10.1	1733	272	8.7	NA	**3.3**							<0.05	11.0	10.0	18.0	6.5	71	<4.0	<0.1	<1.0	2.5	<5.0	<5.0	5.9	<0.2
06/04/03	24	109.0	8.0	9.4	>2420	770	10.5	NA	3.7																				
06/17/03	24	125.0	8.1	9.3	2420	328	11.8	7.2	2.4							<0.05	4.9	5.2	10.0	3.9	9	<4.0	<0.1	<1.0	1.1	<5.0	<5.0	<2.0	<0.2
06/30/03	25	199.0	9.1	11.7	>2420	727	6.8	NA	2.7							<0.05	9.0	9.6	17.0	6.7	71	<4.0	<0.1	<1.0	1.1	<5.0	<5.0	<2.0	<0.2
07/23/03	24	128.0	7.8	9.9	1986	129	9.4																						
08/05/03	23	124.0	7.8	11.3	1553	50	7.8																						
08/20/03	23	236.0	7.9	9.5	>2420	>2420	4.5																						
09/09/03	21	269.0	8.2	7.9	>2420	866	5.8																						
09/22/03	23	133.0	8.1	8.1	2420	130	4.1																						
10/07/03	21	208.0	8.6	10.2	1553	77	2.1																						
10/21/03	20	289.0	8.8	5.5	727	12	1.6																						
11/04/03	14	233.0	8.2	11.7	980	20	2.9																						
11/17/03	17	150.0	7.9	9.3	>2420	210	9.9																						
01/06/04	NF	NF	NF	NF	NF	NF	NF																						
Count	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**4**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**14**	**109.0**	**7.8**	**5.5**	**491**	**9**	**1.5**	**<4.0**	**1.8**							**<0.05**	**4.9**	**5.2**	**10.0**	**3.9**	**9**	**<4.0**	**<0.1**	**<1.0**	**1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**20**	**263.3**	**8.2**	**10.5**	**1764**	**349**	**6.1**	**3.3**	**2.9**							**0.04**	**16.4**	**13.0**	**21.8**	**8.1**	**81**	**2.5**	**<0.1**	**<1.0**	**1.6**	**<5.0**	**<5.0**	**2.0**	**<0.2**
Median	**21**	**227.5**	**8.1**	**10.2**	**1860**	**111**	**6.3**	**2.0**	**2.8**							**0.03**	**11.0**	**10.0**	**18.0**	**6.7**	**71**	**2.0**	**<0.1**	**<1.0**	**1.1**	**<5.0**	**<5.0**	**1.0**	**<0.2**
Max	**25**	**638.0**	**9.1**	**19.6**	**>2420**	**>2420**	**11.8**	**7.2**	**3.7**							**0.10**	**40.0**	**25.0**	**40.0**	**15.0**	**160**	**4.3**	**<0.1**	**<1.0**	**2.5**	**<5.0**	**<5.0**	**5.9**	**<0.2**
Q1	**17**	**137.3**	**7.9**	**9.3**	**1015**	**32**	**3.0**	**2.0**	**2.6**							**0.03**	**9.0**	**9.6**	**17.0**	**6.5**	**71**	**2.0**	**<0.1**	**<1.0**	**1.1**	**<5.0**	**<5.0**	**1.0**	**<0.2**
Q3	**23**	**284.0**	**8.4**	**11.5**	**2480**	**314**	**8.7**	**3.3**	**3.5**							**0.03**	**17.0**	**15.0**	**24.0**	**8.4**	**94**	**2.0**	**<0.1**	**<1.0**	**2.5**	**<5.0**	**<5.0**	**1.0**	**<0.2**

NA: Sample was planned for collection, however it was unacceptable (possible QA/QC issue or equipment failure) NF: No Flow *: Significant difference from laboratory control MDD: Minimum Detectable Difference

Date	Temp (C)	Field SC (umhos)	pH	DO (mg/L)	Total Coli MPN	E. Coli MPN	Turb (ntu)	TSS (mg/L)	TOC (mg/L)	48H Cerio		96H Fathead		96H Algae Growth		Partial Minerals (mg/L)						Total Trace Elements (ug/L)							
										Result	Control	Result	Control	Result	Control	B	Cl	SO_4	Ca	Mg	Hard	As	Cd	Cr	Cu	Pb	Ni	Zn	Hg
STC208	**TID Lower Lateral 2 @ Grayson Road**																												
01/22/03	13	961.0	8.7	15.6	1733	21	20.5																						
02/04/03	10	979.0	8.3	14.3	2420	5	1.1																						
02/19/03	10	694.0	7.9	2.4	866	2	1.1																						
03/05/03	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
03/18/03	15	242.0	9.4	12.5	792	8	6.6	<4.0	NA							0.05	25.0	10.0	18.0	6.4	71	<4.0	<0.1	<1.0	1.4	<5.0	<5.0	<2.0	<0.2
04/02/03	16	196.0	8.6	12.4	2420	15	12.9	<4.0	1.5																				
04/16/03	17	260.0	7.1	1.2	>2420	28	31.2	<4.0	2.5							<0.05	20.0	8.4	15.0	5.2	59	<4.0	<0.1	<1.0	1.6	<5.0	<5.0	<2.0	<0.2
05/06/03	19	170.0	9.0	12.2	260	22	4.8	NA	3.1																				
05/21/03	21	146.0	8.1	10.3	1986	66	7.1	NA	2.1							<0.05	8.7	6.2	11.0	3.7	43	<4.0	<0.1	<1.0	1.9	<5.0	<5.0	5.7	<0.2
06/04/03	24	108.0	8.5	8.7	2420	98	6.4	<4.0	3.3																				
06/17/03	23	136.0	8.1	11.2	1300	31	10.6	4.8	1.8							<0.05	10.0	6.5	10.0	3.7	41	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
06/30/03	22	147.0	8.5	10.4	2420	35	6.7	NA	2.1							<0.05	10.0	7.0	11.0	3.8	43	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
07/23/03	24	182.0	8.2	9.4	>2420	25	2.7																						
08/05/03	23	196.0	8.4	10.9	>2420	31	3.6																						
08/20/03	21	132.0	8.0	10.0	>2420	61	8.0																						
09/09/03	20	239.0	7.9	10.2	>2420	67	2.5																						
09/22/03	23	120.0	8.5	9.7	>2420	15	2.3																						
10/07/03	21	186.0	8.4	9.2	>2420	11	4.3																						
10/21/03	18	128.0	7.8	9.5	>2420	17	3.5																						
11/04/03	11	994.0	8.4	13.4	>2420	26	5.5																						
11/17/03	15	972.0	8.5	NA	>2420	50	1.0																						
01/06/04	9	934.0	8.9	14.2	2420	5	1.0																						
Count	**21**	**21**	**21**	**20**	**21**	**21**	**21**	**5**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**9**	**108.0**	**7.1**	**1.2**	**260**	**2**	**1.0**	**<4.0**	**1.5**							**<0.05**	**8.7**	**6.2**	**10.0**	**3.7**	**41**	**<4.0**	**<0.1**	**<1.0**	**<1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**18**	**386.8**	**8.3**	**10.4**	**2097**	**30**	**6.8**	**2.6**	**2.3**							**0.03**	**14.7**	**7.6**	**13.0**	**4.6**	**51**	**<4.0**	**<0.1**	**<1.0**	**1.2**	**<5.0**	**<5.0**	**1.9**	**<0.2**
Median	**19**	**196.0**	**8.4**	**10.4**	**2420**	**25**	**4.8**	**2.0**	**2.1**							**<0.05**	**10.0**	**7.0**	**11.0**	**3.8**	**43**	**<4.0**	**<0.1**	**<1.0**	**1.4**	**<5.0**	**<5.0**	**1.0**	**<0.2**
Max	**24**	**994.0**	**9.4**	**15.6**	**>2420**	**98**	**31.2**	**4.8**	**3.3**							**0.05**	**25.0**	**10.0**	**18.0**	**6.4**	**71**	**<4.0**	**<0.1**	**<1.0**	**1.9**	**<5.0**	**<5.0**	**5.7**	**<0.2**
Q1	**15**	**146.0**	**8.1**	**9.4**	**1986**	**15**	**2.5**	**2.0**	**2.0**							**0.03**	**10.0**	**6.5**	**11.0**	**3.7**	**43**	**<4.0**	**<0.1**	**<1.0**	**0.5**	**<5.0**	**<5.0**	**1.0**	**<0.2**
Q3	**22**	**694.0**	**8.5**	**12.4**	**2500**	**35**	**7.1**	**2.0**	**2.8**							**0.03**	**20.0**	**8.4**	**15.0**	**5.2**	**59**	**<4.0**	**<0.1**	**<1.0**	**1.6**	**<5.0**	**<5.0**	**1.0**	**<0.2**
STC501	**Harding Drain @ Carpenter Road**																												
01/14/03	17	1130.0	7.6	9.4	1733	488	7.3																						
01/22/03	16	1100.0	7.8	11.5	>2420	261	14.6																						
01/29/03	16	1080.0	7.5	8.8			5.1			100	100	100	100	0.368*	3.28														
02/04/03	14	1070.0	7.7	9.6	>2420	238	3.4																						
02/20/03	14	902.0	7.6	9.4	>2420	461	5.0																						
03/06/03	19	930.0	7.8	15.3	>2420	435	3.1																						
03/20/03	18	851.0	7.6	8.7	>2420	153	5.7	NA	5.4							NA	NA	NA	NA	NA	NA	5.6	<0.1	1.6	2.8	<5.0	<5.0	24.0	<0.2
03/25/03	17	585.0	7.5	8.3			698.0		2.8	90	100	NA	NA	4.46*	2.96	0.10	64.0	45.0	34.0	14.0	140	7.5	0.20	16.0	30.0	14.0	13.0	140.0	<0.2
04/03/03	17	520.0	7.3	9.6	>2420	435	29.1	NA	NA																				
04/17/03	19	532.0	8.0	10.6	>2420	179	9.0	10.0	4.3	100	100	100	100	3.61* MDD47%	1.84	0.07	59.0	32.0	28.0	7.5	100	<4.0	<0.1	<1.0	1.9	<5.0	<5.0	13.0	<0.2
05/08/03	19	886.0	7.3	7.9	>2420	1120	16.1	NA	12.0																				
05/22/03	25	447.0	8.5	12.1	>2420	196	10.2	7.2	3.1	100	100	90	100	4.22* MDD91%	2.08	0.07	40.0	26.0	28.0	8.9	110	<4.0	<0.1	<1.0	2.2	<5.0	<5.0	9.1	<0.2
06/05/03	25	740.0	8.4	12.8	>2420	649	6.8	4.8	8.3																				
06/19/03	23	555.0	8.0	9.8	>2420	345	5.0	7.2	4.8							0.08	50.0	38.0	32.0	9.4	120	4.2	<0.1	<1.0	2.7	<5.0	<5.0	13.0	<0.2
06/30/03	23	404.0	8.3	10.5	>2420	291	7.0		3.6							0.06	46.0	18.0	25.0	6.6	90	<4.0	<0.1	<1.0	2.2	<5.0	<5.0	6.9	<0.2
07/24/03	26	766.0	7.6	9.7			70.3																						
07/31/03	25	717.0	7.6	8.4	>2420	365	6.6																						
08/07/03	22	420.0	7.7	8.3	>2420	517	396.0																						
08/21/03	23	456.0	7.6	7.6	>2420	1203	76.0																						
08/28/03	24	805.0	7.6	8.5	>2420	1300	28.5																						
09/11/03	26	843.0	8.2	11.3	>2420	866	3.0																						
09/25/03	23	527.0	8.5	13.5	>2420	980	6.3									0.09													
10/09/03	20	508.0	8.0	11.0	>2420	108	3.8																						
10/23/03	19	430.0	7.9	11.7	>2420	411	19.6																						
11/06/03	18	1190.0	7.9	11.2	>2420	345	3.1																						
11/20/03	18	974.0	7.6	9.3	>2420	93	NA																						
01/08/04	15	1190.0	7.7	7.7	>2420	816	NA																						
Count	**27**	**27**	**27**	**27**	**24**	**24**	**25**	**4**	**8**	**4**	**4**	**4**	**4**	**4**	**4**	**6**	**5**	**5**	**5**	**5**	**5**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Min	**14**	**404.0**	**7.3**	**7.6**	**1733**	**93**	**3.0**	**4.8**	**2.8**							**0.06**	**40.0**	**18.0**	**25.0**	**6.6**	**90**	**<4.0**	**<0.1**	**<1.0**	**1.9**	**<5.0**	**<5.0**	**6.9**	**<0.2**
Mean	**20**	**761.4**	**7.8**	**10.1**	**2468**	**511**	**57.5**	**7.3**	**5.5**							**0.08**	**51.8**	**31.8**	**29.4**	**9.3**	**112**	**3.9**	**0.08**	**3.3**	**7.0**	**4.4**	**4.3**	**34.3**	**<0.2**
Median	**19**	**766.0**	**7.7**	**9.6**	**>2420**	**423**	**7.0**	**7.2**	**4.6**							**0.08**	**50.0**	**32.0**	**28.0**	**8.9**	**110**	**3.1**	**<0.1**	**<1.0**	**2.5**	**<5.0**	**<5.0**	**13.0**	**<0.2**
Max	**26**	**1190.0**	**8.5**	**15.3**	**>2420**	**1300**	**698.0**	**10.0**	**12.0**							**0.10**	**64.0**	**45.0**	**34.0**	**14.0**	**140**	**7.5**	**0.20**	**16.0**	**30.0**	**14.0**	**13.0**	**140.0**	**<0.2**
Q1	**17**	**523.5**	**7.6**	**8.6**	**2500**	**255**	**5.0**	**6.6**	**3.5**							**0.07**	**46.0**	**26.0**	**28.0**	**7.5**	**100**	**2.0**	**0.05**	**0.5**	**2.2**	**2.5**	**2.5**	**10.1**	**<0.2**
Q3	**23**	**952.0**	**8.0**	**11.3**	**2500**	**691**	**19.6**	**7.9**	**6.1**							**0.09**	**59.0**	**38.0**	**32.0**	**9.4**	**120**	**5.3**	**0.05**	**1.3**	**2.8**	**2.5**	**2.5**	**21.3**	**<0.2**

NA: Sample was planned for collection, however it was unacceptable (possible QA/QC issue or equipment failure) NF: No Flow *: Significant difference from laboratory control MDD: Minimum Detectable Difference

Date	Temp (C)	Field SC (umhos)	pH	DO (mg/L)	Total Coli MPN	E. Coli MPN	Turb (ntu)	TSS (mg/L)	TOC (mg/L)	48H Cerio		96H Fathead		96H Algae Growth		Partial Minerals (mg/L)						Total Trace Elements (ug/L)							
										Result	Control	Result	Control	Result	Control	B	Cl	SO_4	Ca	Mg	Hard	As	Cd	Cr	Cu	Pb	Ni	Zn	Hg
MER201	**TID Lateral 6/7 @ Central**																												
01/22/03	15	1071.0	8.4	15.1	689	58	2.2																						
02/04/03	10	1090.0	7.9	14.9	>2420	>2420	1.1																						
02/20/03	9	944.0	8.5	18.2	1414	69	0.8																						
03/06/03	19	1120.0	7.8	15.6	>2420	58	1.7																						
03/20/03	17	766.0	8.1	13.3	1300	173	3.8	NA	5.7							NA	NA	NA	NA	NA	NA	4.9	<0.1	<1.0	5.2	<5.0	<5.0	<2.0	<0.2
04/03/03	16	642.0	7.8	13.7	>2420	517	28.7	NA	NA																				
04/17/03	17	354.0	7.7	10.5	>2420	248	8.3	9.6	5.2							<0.05	19.0	16.0	29.0	8.8	110	<4.0	<0.1	<1.0	4.4	<5.0	<5.0	<2.0	<0.2
05/08/03	NA	NA	NA	NA	NA	NA	NA																						
Count	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
Min	**9**	**354.0**	**7.7**	**10.5**	**689**	**58**	**0.8**	**9.6**	**5.2**							**<0.05**	**19.0**	**16.0**	**29.0**	**8.8**	**110**	**<4.0**	**<0.1**	**<1.0**	**4.4**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**15**	**855.3**	**8.0**	**14.5**	**1915**	**518**	**6.7**																						
Median	**16**	**944.0**	**7.9**	**14.9**	**>2420**	**173**	**2.2**																						
Max	**19**	**1120.0**	**8.5**	**18.2**	**>2420**	**>2420**	**28.7**		**5.7**													**4.9**	**<0.1**	**<1.0**	**5.2**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q1	**13**	**704.0**	**7.8**	**13.5**	**1357**	**64**	**1.4**		**5.3**													**2.7**	**<0.1**	**<1.0**	**4.6**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q3	**17**	**1080.5**	**8.3**	**15.4**	**2500**	**383**	**6.1**		**5.6**													**4.2**	**<0.1**	**<1.0**	**5.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
MER203	**TID Lateral 7 @ Central**																												
05/22/03	25	449.0	8.1	10.3	>2420	108	5.5	<4.0	4.0							0.06	26.0	21.0	39.0	12.0	150	5.7	<0.1	<1.0	3.7	<5.0	<5.0	<2.0	<0.2
06/05/03	23	440.0	7.7	9.1	>2420	1986	3.9	10.0	10.0																				
06/19/03	22	374.0	7.7	10.7	>2420	152	8.6	4.4	4.3							0.05	26.0	17.0	30.0	9.2	110	4.3	<0.1	<1.0	3.0	<5.0	<5.0	4.8	<0.2
06/30/03	21	290.0	7.9	11.1	1011	118	12.4	8.8	3.7							<0.05	17.0	13.0	24.0	7.5	92	<4.0	<0.1	<1.0	2.4	<5.0	<5.0	<2.0	<0.2
07/31/03	22	357.0	7.7	11.1	>2420	105	12.9																						
08/07/03	23	713.0	8.0	11.7	>2420	461	1.8																						
08/21/03	22	891.0	7.5	10.1	>2420	387	0.0																						
08/28/03	21	337.0	7.8	10.8	>2420	63	2.7																						
09/11/03	24	438.0	8.2	11.8	>2420	50	0.9																						
09/25/03	22	988.0	8.0	12.2	>2420	37	1.2									0.17													
10/09/03	20	525.0	7.7	10.7	>2420	63	1.9																						
10/23/03	19	325.0	7.5	10.8	>2420	78	35.0																						
11/06/03	17	1070.0	8.3	17.3	>2420	30	1.2																						
11/20/03	16	908.0	8.3	14.9	>2420	91	NA																						
01/08/04	13	997.0	7.7	9.4	>2420	17	NA																						
01/20/04	12	1200.0	7.6	10.8	>2420	36	0.3																						
Count	**16**	**16**	**16**	**16**	**16**	**16**	**14**	**4**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
Min	**12**	**290.0**	**7.5**	**9.1**	**1011**	**17**	**0.0**	**<4.0**	**3.7**							**<0.05**	**17.0**	**13.0**	**24.0**	**7.5**	**92**	**<4.0**	**<0.1**	**<1.0**	**2.4**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**20**	**643.9**	**7.9**	**11.4**	**2407**	**236**	**6.3**	**6.3**	**5.5**							**0.08**	**23.0**	**17.0**	**31.0**	**9.6**	**117**	**4.0**	**<0.1**	**<1.0**	**3.0**	**<5.0**	**<5.0**	**2.3**	**<0.2**
Median	**22**	**487.0**	**7.8**	**10.8**	**>2420**	**85**	**2.3**	**6.6**	**4.2**							**0.06**	**26.0**	**17.0**	**30.0**	**9.2**	**110**	**4.3**	**<0.1**	**<1.0**	**3.0**	**<5.0**	**<5.0**	**1.0**	**<0.2**
Max	**25**	**1200.0**	**8.3**	**17.3**	**>2420**	**1986**	**35.0**	**10.0**	**10.0**							**0.17**	**26.0**	**21.0**	**39.0**	**12.0**	**150**	**5.7**	**<0.1**	**<1.0**	**3.7**	**<5.0**	**<5.0**	**4.8**	**<0.2**
Q1	**19**	**369.8**	**7.7**	**10.6**	**2500**	**47**	**1.2**	**3.8**	**3.9**							**0.05**	**21.5**	**15.0**	**27.0**	**8.4**	**101**	**3.2**	**<0.1**	**<1.0**	**2.7**	**<5.0**	**<5.0**	**1.0**	**<0.2**
Q3	**22**	**928.0**	**8.0**	**11.7**	**2500**	**127**	**7.8**	**9.1**	**5.7**							**0.09**	**26.0**	**19.0**	**34.5**	**10.6**	**130**	**5.0**	**<0.1**	**<1.0**	**3.4**	**<5.0**	**<5.0**	**2.9**	**<0.2**
STANISLAUS WATERSHED																													
CAL201	**Stanislaus River @ Camp Nine Road**																												
02/18/03	6	37.0	8.0	12.8	16	4	2.5																						
Count	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TUO201	**Stanislaus River @ Parrot's Ferry**																												
01/21/03	12	56.0	7.3	9.7	6	<1	1.3																						
02/04/03	12	58.0	7.5	10.8	46	<1	0.5																						
Count	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**0**	**0**							**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

NA: Sample was planned for collection, however it was unacceptable (possible QA/QC issue or equipment failure) NF: No Flow *: Significant difference from laboratory control MDD: Minimum Detectable Difference

Date	Temp (C)	Field SC (umhos)	pH	DO (mg/L)	Total Coli MPN	E. Coli MPN	Turb (ntu)	TSS (mg/L)	TOC (mg/L)	48H Cerio		96H Fathead		96H Algae Growth		Partial Minerals (mg/L)						Total Trace Elements (ug/L)							
										Result	Control	Result	Control	Result	Control	B	Cl	SO_4	Ca	Mg	Hard	As	Cd	Cr	Cu	Pb	Ni	Zn	Hg
STC201	**Stanislaus River @ Knight's Ferry**																												
01/21/03	NA	NA	NA	NA	NA	NA	NA																						
01/23/03	11	83.0	7.6	12.6	43	11	0.9																						
02/04/03	11	85.0	8.1	11.8	106	4	0.0																						
02/18/03	11	86.0	8.0	12.3	613	19	1.0																						
03/06/03	11	73.0	8.0	12.1	62	13	0.7																						
03/19/03	12	67.0	7.9	12.1	36	7	0.7	<5.0	1.4							<0.05	2.3	3.0	6.8	2.6	28	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
04/01/03	11	61.0	8.1	12.0	101	4	1.0	<4.0	<1.0																				
04/15/03	12	61.0	8.1	12.0	78	9	0.7	<4.0	1.5							<0.05	2.1	3.0	6.4	2.1	25	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
05/07/03	12	61.0	8.2	11.7	387	4	0.3	NA	1.6																				
05/20/03	13	62.0	8.2	11.9	64	3	0.7	<4.0	1.4							<0.05	NA	NA	6.0	2.0	23	<4.0	<0.1	<1.0	1.1	<5.0	<5.0	<2.0	<0.2
06/03/03	13	58.0	8.1	11.1	125	3	0.9	<4.0	2.6																				
06/18/03	14	58.0	7.9	12.5	345	9	0.7	<4.0	1.4							<0.05	<2.0	2.6	6.4	2.0	24	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
06/30/03	14	58.0	8.0	12.0	525	2	0.7	<4.0	1.7							<0.05	2.1	2.6	6.2	1.9	23	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
07/22/03	14	58.0	7.8	12.2	285	5	0.7																						
08/06/03	14	59.0	8.2	11.9	184	19	0.7																						
08/19/03	14	59.0	8.0	13.5	435	14	0.8																						
09/10/03	14	60.0	7.9	11.6	1300	13	0.6																						
09/24/03	15	51.0	8.0	12.0	649	6	0.9																						
10/08/03	15	61.0	8.0	12.0	1046	6	0.5																						
10/22/03	13	60.0	7.6	14.0	1046	71	0.9																						
11/05/03	12	62.0	8.1	12.2	649	15	1.1																						
11/19/03	12	61.0	8.1	11.5	164	9	0.8																						
01/07/04	10	74.0	8.2	13.8	101	20	1.5																						
Count	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**7**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**4**	**4**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**10**	**51.0**	**7.6**	**11.1**	**36**	**2**	**0.0**	**<4.0**	**<1.0**							**<0.05**	**<2.0**	**2.6**	**6.0**	**1.9**	**23**	**<4.0**	**<0.1**	**<1.0**	**<1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**13**	**64.5**	**8.0**	**12.2**	**379**	**12**	**0.8**	**2.1**	**1.5**							**<0.05**	**1.9**	**2.8**	**6.4**	**2.1**	**25**	**<4.0**	**<0.1**	**<1.0**	**0.6**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Median	**13**	**61.0**	**8.0**	**12.0**	**235**	**9**	**0.7**	**<4.0**	**1.5**							**<0.05**	**2.1**	**2.8**	**6.4**	**2.0**	**24**	**<4.0**	**<0.1**	**<1.0**	**0.5**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Max	**15**	**86.0**	**8.2**	**14.0**	**1300**	**71**	**1.5**	**<5.0**	**2.6**							**<0.05**	**2.3**	**3.0**	**6.8**	**2.6**	**28**	**<4.0**	**<0.1**	**<1.0**	**1.1**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q1	**11**	**59.0**	**7.9**	**11.9**	**101**	**4**	**0.7**	**2.0**	**1.4**							**<0.05**	**1.8**	**2.6**	**6.2**	**2.0**	**23**	**<4.0**	**<0.1**	**<1.0**	**0.5**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q3	**14**	**65.8**	**8.1**	**12.3**	**591**	**14**	**0.9**	**2.0**	**1.6**							**<0.05**	**2.2**	**3.0**	**6.4**	**2.1**	**25**	**<4.0**	**<0.1**	**<1.0**	**0.5**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
STC514	**Stanislaus River @ Caswell Park**																												
01/23/03	12	155.0	8.1	11.5	122	27	4.0																						
01/29/03	11	91.0	7.6	10.8			14.3			100	100	100	100	1.69*	3.28	<0.05													
02/04/03	10	119.0	7.6	11.4	1553	67	3.5																						
02/19/03	11	113.0	8.1	12.0	1203	33	4.0																						
03/05/03	12	111.0	8.0	11.3	135	21	2.1																						
03/18/03	14	116.0	7.9	11.0	1733	26	4.6	4.0	NA							<0.05	5.4	4.6	10.0	4.4	43	<4.0	<0.1	<1.0	1.4	<5.0	<5.0	4.9	<0.2
03/25/03	14	100.0	7.5	10.3			6.2			100	100	NA	NA	2.28*	2.96														
04/02/03	14	81.0	8.0	10.7	>2420	79	5.2	8.8	1.6																				
04/16/03	15	88.0	7.9	10.5	276	25	4.4	<4.0	2.6	100	100	100	100	1.68* MDD 4%	1.90	<0.05	3.1	3.6	8.5	3.2	34	<4.0	<0.1	<1.0	1.4	<5.0	<5.0	<2.0	<0.2
05/06/03	15	94.0	7.7	9.6	1986	66	4.4	NA	2.1																				
05/21/03	18	66.0	7.7	10.1	>2420	66	7.5	NA	2.3	100	100	100	100	1.51* MDD6%	2.01	<0.05	2.4	2.7	6.7	2.5	27	<4.0	<0.1	<1.0	2.1	<5.0	<5.0	<2.0	<0.2
06/04/03	18	71.0	8.0	9.6	>2420	107	5.7	8.0	2.4																				
06/17/03	17	68.0	7.6	9.9	1986	79	7.5	8.0	1.8							<0.05	2.5	3.0	7.2	2.5	28	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
06/30/03	18	64.0	7.8	9.6	>2420	63	5.6	8.4	1.9							<0.05	2.2	2.7	6.9	2.2	26	<4.0	<0.1	<1.0	1.4	<5.0	<5.0	<2.0	<0.2
07/23/03	23	79.0	7.8	8.0	>2420	68	4.6																						
08/05/03	21	79.0	7.7	9.7	>2420	52	6.1																						
08/20/03	22	95.0	7.5	7.9	2420	64	5.7																						
09/09/03	20	96.0	7.6	8.5	>2420	53	8.3																						
09/22/03	20	88.0	7.5	8.6	>2420	81	11.2																						
10/07/03	19	82.0	7.8	8.8	>2420	344	12.3																						
10/21/03	18	71.0	7.6	8.2	>2420	1120	23.0																						
11/04/03	12	99.0	7.6	10.6	>2420	101	4.6																						
11/17/03	13	113.0	7.7	10.3	1203	38	2.7																						
01/06/04	7	144.0	7.7	11.5	>2420	236	37.0																						
01/28/04	11	140.0	8.1	15.1	411	88	5.1																						
02/24/04	13	112.0	7.9	10.8	866	30	0.8																						
03/24/04	17	125.0	7.8	9.1	>2420	69	17.5																						
Count	**27**	**27**	**27**	**27**	**25**	**25**	**27**	**6**	**7**	**4**	**4**	**4**	**4**	**4**	**4**	**6**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**7**	**64.0**	**7.5**	**7.9**	**122**	**21**	**0.8**	**<4.0**	**1.6**							**<0.05**	**2.2**	**2.7**	**6.7**	**2.2**	**26**	**<4.0**	**<0.1**	**<1.0**	**<1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**15**	**98.5**	**7.8**	**10.2**	**1856**	**120**	**8.1**	**6.5**	**2.1**							**<0.05**	**3.1**	**3.3**	**7.9**	**3.0**	**32**	**<4.0**	**<0.1**	**<1.0**	**1.4**	**<5.0**	**<5.0**	**1.8**	**<0.2**
Median	**15**	**95.0**	**7.7**	**10.3**	**>2420**	**66**	**5.6**	**8.0**	**2.1**							**<0.05**	**2.5**	**3.0**	**7.2**	**2.5**	**28**	**<4.0**	**<0.1**	**<1.0**	**1.4**	**<5.0**	**<5.0**	**1.0**	**<0.2**
Max	**23**	**155.0**	**8.1**	**15.1**	**>2420**	**1120**	**37.0**	**8.8**	**2.6**							**<0.05**	**5.4**	**4.6**	**10.0**	**4.4**	**43**	**<4.0**	**<0.1**	**<1.0**	**2.1**	**<5.0**	**<5.0**	**4.9**	**<0.2**
Q1	**12**	**80.0**	**7.6**	**9.4**	**1203**	**38**	**4.4**	**5.0**	**1.9**							**<0.05**	**2.4**	**2.7**	**6.9**	**2.5**	**27**	**<4.0**	**<0.1**	**<1.0**	**1.4**	**<5.0**	**<5.0**	**1.0**	**<0.2**
Q3	**18**	**113.0**	**7.9**	**10.9**	**2500**	**81**	**7.9**	**8.3**	**2.4**							**<0.05**	**3.1**	**3.6**	**8.5**	**3.2**	**34**	**<4.0**	**<0.1**	**<1.0**	**1.4**	**<5.0**	**<5.0**	**1.0**	**<0.2**

NA: Sample was planned for collection, however it was unacceptable (possible QA/QC issue or equipment failure) NF: No Flow *: Significant difference from laboratory control MDD: Minimum Detectable Difference

Date	Temp (C)	Field SC (umhos)	pH	DO (mg/L)	Total Coli MPN	E. Coli MPN	Turb (ntu)	TSS (mg/L)	TOC (mg/L)	48H Cerio		96H Fathead		96H Algae Growth		Partial Minerals (mg/L)						Total Trace Elements (ug/L)							
										Result	Control	Result	Control	Result	Control	B	Cl	SO_4	Ca	Mg	Hard	As	Cd	Cr	Cu	Pb	Ni	Zn	Hg
TUOLUMNE WATERSHED																													
TUO208	**Woods Creek @ Motherlode Fairgrounds**																												
03/19/03	11	281.0	8.2	11.7	1986	84	4.5	<5.0	2.5							<0.05	8.1	10.0	29.0	15.0	130	<4.0	<0.1	<1.0	2.0	<5.0	<5.0	23.0	<0.2
04/01/03	14	394.0	8.2	10.7	1011	206	6.0	4.0	1.7																				
04/15/03	12	336.0	8.2	10.5	1986	225	7.8	<4.0	4.0							<0.05	6.3	16.0	42.0	16.0	170	<4.0	<0.1	<1.0	1.7	<5.0	<5.0	14.0	<0.2
05/07/03	13	278.0	8.2	10.5	>2420	435	10.3	NA	2.8																				
05/20/03	18	437.0	8.3	10.0	>2420	365	2.8	7.2	1.8							<0.05	NA	NA	51.0	20.0	210	<4.0	<0.1	<1.0	1.7	<5.0	<5.0	5.6	<0.2
06/03/03	21	422.0	8.1	8.6	>2420	548	5.5	6.8	3.3																				
06/18/03	21	381.0	8.4	9.8	>2420	361	4.6	5.2	2.0							<0.05	7.0	16.0	47.0	18.0	190	<4.0	<0.1	<1.0	1.3	<5.0	<5.0	4.7	<0.2
06/30/03	21	373.0	8.3	9.6	>2420	461	7.5	10.0	2.1							<0.05	7.5	16.0	46.0	17.0	180	<4.0	<0.1	<1.0	1.1	<5.0	<5.0	5.6	<0.2
07/22/03	23	323.0	8.3	8.7	>2420	479	3.9																						
08/06/03	20	300.0	8.2	8.9	>2420	517	3.5																						
08/19/03	21	272.0	8.3	10.4	>2420	291	3.6																						
09/10/03	17	270.0	8.2	9.2	>2420	365	4.2																						
09/24/03	18	163.0	8.0	9.4	>2420	980	4.2																						
10/08/03	17	150.0	8.1	10.0	>2420	579	3.2																						
10/22/03	15	248.0	8.1	11.7	>2420	345	3.5																						
11/05/03	10	285.0	8.2	11.2	>2420	461	1.8																						
11/19/03	11	366.0	8.2	10.5	>2420	308	1.5																						
01/07/04	10	443.0	8.3	13.1	>2420	866	3.0																						
01/20/04	9	376.0	8.4	13.3	>2420	326	64.0																						
02/04/04	6	192.0	8.2	15.6	1986	365	16.0																						
02/18/04	9	88.0	7.8	14.2	>2420	1553	142.0																						
03/03/04	9	236.0	8.5	12.3	1553	921	NA																						
03/17/04	14	207.0	8.6	11.0	>2420	166	3.8																						
Count	**23**	**23**	**23**	**23**	**23**	**23**	**22**	**7**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**4**	**4**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**6**	**88.0**	**7.8**	**8.6**	**1011**	**84**	**1.5**	**<4.0**	**1.7**							**<0.05**	**6.3**	**10.0**	**29.0**	**15.0**	**130**	**<4.0**	**<0.1**	**<1.0**	**1.1**	**<5.0**	**<5.0**	**4.7**	**<0.2**
Mean	**15**	**296.6**	**8.2**	**10.9**	**2327**	**487**	**14.0**	**5.4**	**2.5**							**<0.05**	**7.2**	**14.5**	**43.0**	**17.2**	**176**	**<4.0**	**<0.1**	**<1.0**	**1.6**	**<5.0**	**<5.0**	**10.6**	**<0.2**
Median	**14**	**285.0**	**8.2**	**10.5**	**>2420**	**365**	**4.2**	**5.2**	**2.3**							**<0.05**	**7.3**	**16.0**	**46.0**	**17.0**	**180**	**<4.0**	**<0.1**	**<1.0**	**1.7**	**<5.0**	**<5.0**	**5.6**	**<0.2**
Max	**23**	**443.0**	**8.6**	**15.6**	**>2420**	**1553**	**142.0**	**10.0**	**4.0**							**<0.05**	**8.1**	**16.0**	**51.0**	**20.0**	**210**	**<4.0**	**<0.1**	**<1.0**	**2.0**	**<5.0**	**<5.0**	**23.0**	**<0.2**
Q1	**11**	**242.0**	**8.2**	**9.7**	**2500**	**317**	**3.5**	**3.3**	**2.0**							**<0.05**	**6.8**	**14.5**	**42.0**	**16.0**	**170**	**<4.0**	**<0.1**	**<1.0**	**1.3**	**<5.0**	**<5.0**	**5.6**	**<0.2**
Q3	**19**	**374.5**	**8.3**	**11.7**	**2500**	**533**	**7.1**	**7.0**	**2.9**							**<0.05**	**7.7**	**16.0**	**47.0**	**18.0**	**190**	**<4.0**	**<0.1**	**<1.0**	**1.7**	**<5.0**	**<5.0**	**14.0**	**<0.2**
TUO205	**Woods Creek @ Highway 108**																												
02/18/03	8	417.0	8.1	12.2	548	68	5.4																						
03/06/03	9	436.0	8.1	12.5	240	12	2.2																						
Count	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TUO202	**Woods Creek @ Mill Villa Drive**																												
01/21/03	10	456.0	7.7	12.1	687	74	5.3																						
02/04/03	7	465.0	8.0	12.6	326	17	2.3																						
02/18/03	9	424.0	8.0	12.3	199	59	5.3																						
03/06/03	10	437.0	8.2	13.0	126	6	3.3																						
03/19/03	11	444.0	7.1	11.4	649	96	3.6	<5.0	2.1							0.15	110.0	50.0	41.0	11.0	150	<4.0	0.39	<1.0	3.4	<5.0	<5.0	19.0	<0.2
04/01/03	13	416.0	8.0	10.8	756	139	3.8	<4.0	1.3																				
04/15/03	11	366.0	7.9	11.0	1300	190	8.2	<4.0	3.2							<0.05	6.4	27.0	45.0	16.0	180	<4.0	0.23	<1.0	5.8	<5.0	<5.0	20.0	<0.2
05/07/03	12	309.0	8.0	10.4	>2420	1300	6.9	NA	2.4																				
05/20/03	17	468.0	8.0	10.3	>2420	33	3.7	<4.0	1.7							<0.05	NA	NA	54.0	21.0	220	<4.0	0.33	<1.0	5.5	<5.0	<5.0	19.0	<0.2
06/03/03	21	467.0	8.0	8.9	>2420	135	7.4	5.2	3.2																				
06/18/03	21	446.0	8.2	9.6	>2420	687	7.3	6.4	2.2							<0.05	8.6	33.0	54.0	20.0	220	<4.0	0.50	<1.0	4.4	<5.0	<5.0	28.0	<0.2
06/30/03	20	450.0	8.2	9.6	>2420	124	8.1	11.0	2.4							<0.05	8.5	34.0	54.0	20.0	220	<4.0	0.76	<1.0	<1.0	<5.0	<5.0	38.0	<0.2
07/22/03	23	443.0	8.2	8.6	870	185	9.9																						
08/06/03	20	369.0	8.1	8.8	>2420	299	8.9																						
08/19/03	21	341.0	8.2	10.5	2420	108	5.4																						
09/10/03	17	332.0	8.2	9.4	2420	210	5.0																						
09/24/03	18	257.0	8.0	9.9	2420	107	4.4																						
10/08/03	17	322.0	8.0	10.0	2420	186	10.0																						
10/22/03	15	293.0	7.9	12.1	1414	121	2.7																						
11/05/03	9	321.0	8.0	12.3	2420	155	2.9																						
11/19/03	11	376.0	8.0	10.6	1120	61	3.1																						
01/07/04	9	492.0	8.0	13.6	1733	58	7.6																						
02/04/04	6	238.0	7.9	15.8	1300	199	17.3																						
02/18/04	9	113.0	7.8	14.2	>2420	1986	153.0																						
03/03/04	8	303.0	8.0	12.5	219	36	NA																						
03/17/04	13	268.0	8.2	10.9	1300	23	3.2																						
Count	**26**	**26**	**26**	**26**	**26**	**26**	**25**	**7**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**4**	**4**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**6**	**113.0**	**7.1**	**8.6**	**126**	**6**	**2.3**	**<4.0**	**1.3**							**<0.05**	**6.4**	**27.0**	**41.0**	**11.0**	**150**	**<4.0**	**0.23**	**<1.0**	**<1.0**	**<5.0**	**<5.0**	**19.0**	**<0.2**
Mean	**14**	**369.8**	**8.0**	**11.2**	**1600**	**254**	**11.9**	**4.4**	**2.3**							**0.05**	**33.4**	**36.0**	**49.6**	**17.6**	**198**	**<4.0**	**0.44**	**<1.0**	**3.9**	**<5.0**	**<5.0**	**24.8**	**<0.2**
Median	**13**	**372.5**	**8.0**	**10.9**	**1574**	**123**	**5.3**	**<5.0**	**2.3**							**0.03**	**8.6**	**33.5**	**54.0**	**20.0**	**220**	**<4.0**	**0.39**	**<1.0**	**4.4**	**<5.0**	**<5.0**	**20.0**	**<0.2**
Max	**23**	**492.0**	**8.2**	**15.8**	**>2420**	**1986**	**153.0**	**11.0**	**3.2**							**0.15**	**110.0**	**50.0**	**54.0**	**21.0**	**220**	**<4.0**	**0.76**	**<1.0**	**5.8**	**<5.0**	**<5.0**	**38.0**	**<0.2**
Q1	**9**	**312.0**	**8.0**	**10.0**	**785**	**60**	**3.6**	**2.0**	**2.0**							**0.03**	**8.0**	**31.5**	**45.0**	**16.0**	**180**	**<4.0**	**0.33**	**<1.0**	**3.4**	**<5.0**	**<5.0**	**19.0**	**<0.2**
Q3	**18**	**445.5**	**8.2**	**12.3**	**2480**	**189**	**8.1**	**5.8**	**2.6**							**0.03**	**34.0**	**38.0**	**54.0**	**20.0**	**220**	**<4.0**	**0.50**	**<1.0**	**5.5**	**<5.0**	**<5.0**	**28.0**	**<0.2**

NA: Sample was planned for collection, however it was unacceptable (possible QA/QC issue or equipment failure) NF: No Flow *: Significant difference from laboratory control MDD: Minimum Detectable Difference

Date	Temp (C)	Field SC (umhos)	pH	DO (mg/L)	Total Coli MPN	E. Coli MPN	Turb (ntu)	TSS (mg/L)	TOC (mg/L)	48H Cerio		96H Fathead		96H Algae Growth		Partial Minerals (mg/L)						Total Trace Elements (ug/L)							
										Result	Control	Result	Control	Result	Control	B	Cl	SO_4	Ca	Mg	Hard	As	Cd	Cr	Cu	Pb	Ni	Zn	Hg
TUO207	**Sullivan Creek @ Algerine Road**																												
02/18/03	8	96.0	8.1	12.3	397	70	12.8																						
03/06/03	8	88.0	7.9	12.5	104	17	2.7																						
03/19/03	11	99.0	8.2	11.3	308	93	10.5	<5.0	2.0							<0.05	3.5	2.9	9.9	3.8	41	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
04/01/03	13	94.0	7.8	10.4	457	135	6.2	<4.0	1.5																				
04/15/03	11	104.0	7.7	11.0	>2420	457	45.5	16.0	4.7							<0.05	3.7	2.2	10.0	4.3	44	<4.0	<0.1	1.2	2.9	<5.0	<5.0	3.4	<0.2
05/07/03	13	112.0	7.7	10.3	1733	194	11.4	NA	3.1																				
05/20/03	18	119.0	8.2	10.1	649	166	4.8	4.8	2.0							<0.05	NA	NA	11.0	45.0	47	<4.0	<0.1	<1.0	1.8	<5.0	<5.0	2.4	<0.2
06/03/03	22	140.0	8.1	8.7	1203	112	5.9	<4.0	4.8																				
06/18/03	22	98.0	8.1	9.8	>2420	549	6.2	5.2	2.3							<0.05	2.8	3.0	10.0	4.0	42	<4.0	<0.1	<1.0	1.6	<5.0	<5.0	<2.0	<0.2
06/30/03	20	102.0	7.9	9.4	1986	260	5.9	<4.0	2.0							<0.05	3.2	3.7	11.0	4.1	43	<4.0	<0.1	<1.0	1.6	<5.0	<5.0	<2.0	<0.2
07/22/03	23	141.0	7.7	7.6	>2420	78	4.6																						
08/06/03	20	101.0	7.8	8.9	>2420	210	15.9																						
08/19/03	23	125.0	7.9	9.7	2420	28	6.8																						
09/10/03	DRY	DRY	DRY	DRY	DRY	DRY	DRY																						
09/24/03	20	170.0	7.5	8.6	2420	55	3.6																						
10/08/03	16	125.0	7.7	9.8	>2420	921	2.6																						
10/22/03	15	102.0	7.7	10.4	921	12	1.7																						
11/05/03	8	154.0	7.8	12.1	>2420	1300	3.8																						
11/19/03	9	92.0	7.8	11.1	1733	517	2.3																						
01/07/04	7	115.0	7.8	13.3	548	69	6.2																						
01/20/04	7	118.0	8.1	13.5	110	53	3.2																						
02/04/04	6	108.0	8.0	15.1	>2420	411	32.2																						
02/18/04	9	86.0	7.8	14.7	>2420	2420	200.0																						
03/03/04	8	127.0	8.1	12.5	99	45	NA																						
03/17/04	14	113.0	8.2	11.0	649	86	3.3																						
Count	**24**	**24**	**24**	**24**	**24**	**24**	**23**	**7**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**4**	**4**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**6**	**86.0**	**7.5**	**7.6**	**99**	**12**	**1.7**	**<4.0**	**1.5**							**<0.05**	**2.8**	**2.2**	**9.9**	**3.8**	**41**	**<4.0**	**<0.1**	**<1.0**	**<1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**14**	**113.7**	**7.9**	**11.0**	**1489**	**344**	**17.3**	**4.9**	**2.8**							**<0.05**	**3.3**	**3.0**	**10.4**	**12.2**	**43**	**<4.0**	**<0.1**	**0.6**	**1.7**	**<5.0**	**<5.0**	**1.8**	**<0.2**
Median	**13**	**110.0**	**7.9**	**10.7**	**1733**	**124**	**5.9**	**<5.0**	**2.2**							**<0.05**	**3.4**	**3.0**	**10.0**	**4.1**	**43**	**<4.0**	**<0.1**	**<1.0**	**1.6**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Max	**23**	**170.0**	**8.2**	**15.1**	**>2420**	**2420**	**200.0**	**16.0**	**4.8**							**<0.05**	**3.7**	**3.7**	**11.0**	**45.0**	**47**	**<4.0**	**<0.1**	**1.2**	**2.9**	**<5.0**	**<5.0**	**3.4**	**<0.2**
Q1	**8**	**98.8**	**7.8**	**9.8**	**525**	**66**	**3.5**	**2.0**	**2.0**							**<0.05**	**3.1**	**2.7**	**10.0**	**4.0**	**42**	**<4.0**	**<0.1**	**0.5**	**1.6**	**<5.0**	**<5.0**	**1.0**	**<0.2**
Q3	**20**	**125.0**	**8.1**	**12.4**	**2500**	**423**	**11.0**	**5.0**	**3.5**							**<0.05**	**3.6**	**3.2**	**11.0**	**4.3**	**44**	**<4.0**	**<0.1**	**0.5**	**1.8**	**<5.0**	**<5.0**	**2.4**	**<0.2**
TUO209	**Curtis Creek @ Algerine Road**																												
05/20/03	19	251.0	8.1	10.9	1046	461	3.8	<4.0	2.8							<0.05	NA	NA	24.0	11.0	100	<4.0	<0.1	<1.0	2.9	<5.0	<5.0	<2.0	<0.2
06/03/03	26	278.0	8.2	9.1	1203	365	2.3	<4.0	4.9																				
06/18/03	28	285.0	8.5	12.0	>2420	>2420	52.5	<4.0	2.8							<0.05	8.6	10.0	31.0	14.0	130	<4.0	<0.1	<1.0	1.7	<5.0	<5.0	<2.0	<0.2
06/30/03	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
07/22/03	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
08/06/03	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
08/19/03	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
09/24/03	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
10/08/03	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
10/22/03	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
11/05/03	Dry	Dry	Dry	Dry	Dry	Dry	Dry																						
11/19/03	13	317.0	8.0	10.0	>2420	461	0.7																						
01/07/04	8	202.0	7.9	13.3	687	108	4.2																						
01/20/04	8	244.0	8.7	15.8	1986	1553	4.2																						
02/04/04	6	173.0	7.9	16.0	>2420	687	29.6																						
02/18/04	9	109.0	7.7	14.0	>2420	>2420	300.0																						
03/03/04	9	192.0	8.2	12.8	387	101	NA																						
03/17/04	16	263.0	8.7	12.7	1203	157	1.9																						
Count	**10**	**10**	**10**	**10**	**10**	**10**	**9**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
Min	**6**	**109.0**	**7.7**	**9.1**	**387**	**101**	**0.7**	**<4.0**	**2.8**							**<0.05**	**8.6**	**10.0**	**24.0**	**11.0**	**100**	**<4.0**	**<0.1**	**<1.0**	**1.7**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**14**	**231.4**	**8.2**	**12.7**	**1651**	**889**	**44.4**	**<4.0**	**3.5**																				
Median	**11**	**247.5**	**8.2**	**12.8**	**1595**	**461**	**4.2**	**<4.0**	**2.8**																				
Max	**28**	**317.0**	**8.7**	**16.0**	**>2420**	**>2420**	**300.0**	**<4.0**	**4.9**							**<0.05**			**31.0**	**14.0**	**130**	**<4.0**	**<0.1**	**<1.0**	**2.9**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q1	**8**	**194.5**	**7.9**	**11.2**	**1085**	**209**	**2.3**	**<4.0**	**2.8**							**<0.05**			**25.8**	**11.8**	**108**	**<4.0**	**<0.1**	**<1.0**	**2.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q3	**18**	**274.3**	**8.4**	**13.8**	**2500**	**1337**	**29.6**	**<4.0**	**3.9**							**<0.05**			**29.3**	**13.3**	**123**	**<4.0**	**<0.1**	**<1.0**	**2.6**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
TUO203	**Tuolumne River @ Ward's Ferry**																												
01/21/03	8	23.0	8.4	12.3	153	1	0.9																						
Count	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TUO204	**Tuolumne River @ Jacksonville Road/River Road**																												
01/21/03	8	23.0	8.4	12.3	153	1	0.9																						
02/04/03	13	37.0	7.9	10.1	71	2	24.8																						
Count	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

NA: Sample was planned for collection, however it was unacceptable (possible QA/QC issue or equipment failure) NF: No Flow *: Significant difference from laboratory control MDD: Minimum Detectable Difference

Date	Temp (C)	Field SC (umhos)	pH	DO (mg/L)	Total Coli MPN	E. Coli MPN	Turb (ntu)	TSS (mg/L)	TOC (mg/L)	48H Cerio		96H Fathead		96H Algae Growth		Partial Minerals (mg/L)						Total Trace Elements (ug/L)							
										Result	Control	Result	Control	Result	Control	B	Cl	SO_4	Ca	Mg	Hard	As	Cd	Cr	Cu	Pb	Ni	Zn	Hg
STC210	**Tuolumne River @ La Grange**																												
01/21/03	11	42.0	8.0	11.2	22	12	1.9																						
02/04/03	11	42.0	7.7	10.5	24	2	0.0																						
02/18/03	12	41.0	7.5	11.4	61	1	1.2																						
03/04/03	NA	NA	NA	NA	29	<1	NA																						
03/06/03	10	41.0	7.7	10.3	38	2	0.7																						
03/19/03	11	40.0	7.3	10.8	55	2	1.0	<5.0	1.3							<0.05	2.3	2.3	3.7	1.5	16	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
04/01/03	11	40.0	7.5	9.7	85	2	0.6	<4.0	<1.0																				
04/15/03	12	44.0	7.5	10.6	921	31	1.1	<4.0	1.7							<0.05	2.1	2.5	3.7	1.6	16	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
05/07/03	12	40.0	7.7	NA	11	3	0.0	NA	1.7																				
05/20/03	11	39.0	7.6	10.0	18	1	0.7	<4.0	1.3							<0.05	NA	NA	3.3	1.4	14	<4.0	<0.1	<1.0	1.2	<5.0	<5.0	<2.0	<0.2
06/03/03	12	37.0	8.0	10.0	>2420	15	1.9	10.0	2.5																				
06/18/03	12	37.0	7.3	10.6	>2420	5	0.6	<4.0	1.5							<0.05	<2.0	2.2	3.4	1.4	14	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
06/30/03	12	37.0	7.6	10.6	>2420	3	0.7	<4.0	1.6							<0.05	2.1	2.1	3.3	1.3	14	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
07/22/03	12	36.0	7.1	10.7	1203	11	0.6																						
08/06/03	12	37.0	8.1	10.5	1300	6	18.4																						
08/19/03	12	36.0	7.7	10.5	816	1	0.7																						
09/10/03	12	36.0	7.6	10.8	866	26	0.7																						
09/24/03	13	37.0	7.9	11.0	921	11	0.6																						
10/08/03	12	37.0	7.1	10.4	816	3	0.4																						
10/22/03	12	36.0	7.0	10.2	66	2	NA																						
11/05/03	12	35.0	7.7	10.8	299	22	2.1																						
11/19/03	12	37.0	7.3	10.5	435	19	1.0																						
01/07/04	11	37.0	7.7		52	9	1.5																						
Count	**22**	**22**	**22**	**20**	**23**	**23**	**21**	**7**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**4**	**4**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**10**	**35.0**	**7.0**	**9.7**	**11**	**<1**	**0.0**	**<4.0**	**<1.0**							**<0.05**	**<2.0**	**2.1**	**3.3**	**1.3**	**14**	**<4.0**	**<0.1**	**<1.0**	**<1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**12**	**38.4**	**7.6**	**10.6**	**676**	**8**	**1.7**	**3.2**	**1.5**							**<0.05**	**1.9**	**2.3**	**3.5**	**1.4**	**15**	**<4.0**	**<0.1**	**<1.0**	**0.6**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Median	**12**	**37.0**	**7.6**	**10.6**	**299**	**3**	**0.7**	**<4.0**	**1.6**							**<0.05**	**2.1**	**2.3**	**3.4**	**1.4**	**14**	**<4.0**	**<0.1**	**<1.0**	**0.5**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Max	**13**	**44.0**	**8.1**	**11.4**	**>2420**	**31**	**18.4**	**10.0**	**2.5**							**<0.05**	**2.3**	**2.5**	**3.7**	**1.6**	**16**	**<4.0**	**<0.1**	**<1.0**	**1.2**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q1	**11**	**37.0**	**7.4**	**10.4**	**45**	**2**	**0.6**	**2.0**	**1.3**							**<0.05**	**1.8**	**2.2**	**3.3**	**1.4**	**14**	**<4.0**	**<0.1**	**<1.0**	**0.5**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q3	**12**	**40.0**	**7.7**	**10.8**	**921**	**12**	**1.2**	**2.3**	**1.7**							**<0.05**	**2.2**	**2.4**	**3.7**	**1.5**	**16**	**<4.0**	**<0.1**	**<1.0**	**0.5**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
STC205	**Tuolumne River @ Mancini Park**																												
01/23/03	12	206.0	7.5	11.1	921	23	2.7																						
02/04/03	12	203.0	8.0	11.6	461	12	3.2																						
02/19/03	13	190.0	7.5	10.6	980	25	3.3																						
03/05/03	13	188.0	7.6	10.5	313	20	1.6																						
03/18/03	15	206.0	7.5	10.1	1414	24	3.0	<4.0	NA							<0.05	15.0	7.0	14.0	6.2	61	<4.0	<0.1	<1.0	1.1	<5.0	<5.0	<2.0	<0.2
04/02/03	16	191.0	7.6	10.3	>2420	65	2.3	<4.0	1.4																				
04/16/03	No Access	No Access	No Access	No Access	No Access	No Access	No Access																						
05/06/03	16	87.0	7.5	10.2	2420	118	3.3	NA	2.1																				
Count	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Min	**12**	**87.0**	**7.5**	**10.1**	**313**	**12**	**1.6**	**<4.0**	**1.4**							**<0.05**	**15.0**	**7.0**	**14.0**	**6.2**	**61**	**<4.0**	**<0.1**	**<1.0**	**1.1**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**14**	**181.6**	**7.6**	**10.6**	**1287**	**41**	**2.8**																						
Median	**13**	**191.0**	**7.5**	**10.5**	**980**	**24**	**3.0**																						
Max	**16**	**206.0**	**8.0**	**11.6**	**>2420**	**118**	**3.3**	**<4.0**	**2.1**																				
Q1	**13**	**189.0**	**7.5**	**10.3**	**691**	**22**	**2.5**	**<4.0**	**1.6**																				
Q3	**16**	**204.5**	**7.6**	**10.9**	**1917**	**45**	**3.3**	**<4.0**	**1.9**																				
STC216	**Tuolumne River @ Legion Park**																												
05/21/03	21	133.0	7.5	8.9	>2420	147	7.0	NA	2.1							<0.05	8.2	5.7	10.0	4.7	45	<4.0	<0.1	<1.0	2.1	<5.0	<5.0	<2.0	<0.2
06/04/03	24	121.0	7.8	9.3	2420	39	3.1	<4.0	2.4																				
06/17/03	25	133.0	7.9	11.1	2420	39	9.3	7.2	1.7							<0.05	8.7	5.7	10.0	4.5	44	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
06/30/03	23	90.0	7.6	7.8	>2420	96	12.4	4.4	2.2							<0.05	5.6	3.8	6.9	3.1	30	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
07/23/03	26	100.0	7.7	8.4	>2420	51	2.3																						
08/05/03	23	99.0	7.9	10.6	>2420	613	2.5																						
08/20/03	25	98.0	8.0	9.0	>2420	16	28.9																						
09/09/03	21	115.0	7.4	7.8	>2420	122	45.0																						
09/22/03	21	108.0	7.5	8.5	>2420	59	3.3																						
10/07/03	19	118.0	7.6	8.2	>2420	133	2.1																						
10/21/03	16	75.0	7.3	9.5	>2420	55	3.1																						
11/04/03	12	118.0	7.7	11.0	>2420	23	2.6																						
11/17/03	14	134.0	7.6	11.4	2420	37	2.1																						
01/06/04	9	156.0	7.9	15.7	866	11	3.0																						
01/20/04	11	153.0	7.9	11.8	>2420	26	2.6																						
02/04/04	11	146.0	7.7	14.4	1120	22	5.5																						
02/18/04	13	143.0	7.6	12.9	>2420	75	4.3																						
03/03/04	13	161.0	7.9	10.7	345	23	NA																						
03/17/04	14	59.0	8.2	10.5	1733	36	5.0																						
Count	**19**	**19**	**19**	**19**	**19**	**19**	**18**	**3**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
Min	**9**	**59.0**	**7.3**	**7.8**	**345**	**11**	**2.1**	**<4.0**	**1.7**							**<0.05**	**5.6**	**3.8**	**6.9**	**3.1**	**30**	**<4.0**	**<0.1**	**<1.0**	**<1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**18**	**118.9**	**7.7**	**10.4**	**2175**	**85**	**8.0**	**4.5**	**2.1**							**<0.05**	**7.5**	**5.1**	**9.0**	**4.1**	**40**	**<4.0**	**<0.1**	**<1.0**	**1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Median	**19**	**118.0**	**7.7**	**10.5**	**>2420**	**39**	**3.2**	**4.4**	**2.2**							**<0.05**	**8.2**	**5.7**	**10.0**	**4.5**	**44**	**<4.0**	**<0.1**	**<1.0**	**0.5**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Max	**26**	**161.0**	**8.2**	**15.7**	**>2420**	**613**	**45.0**	**7.2**	**2.4**							**<0.05**	**8.7**	**5.7**	**10.0**	**4.7**	**45**	**<4.0**	**<0.1**	**<1.0**	**2.1**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q1	**13**	**99.5**	**7.6**	**8.7**	**2420**	**25**	**2.6**	**3.2**	**2.0**							**<0.05**	**6.9**	**4.8**	**8.5**	**3.8**	**37**	**<4.0**	**<0.1**	**<1.0**	**0.5**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q3	**23**	**138.5**	**7.9**	**11.3**	**2500**	**86**	**6.6**	**5.8**	**2.3**							**<0.05**	**8.5**	**5.7**	**10.0**	**4.6**	**45**	**<4.0**	**<0.1**	**<1.0**	**1.3**	**<5.0**	**<5.0**	**<2.0**	**<0.2**

NA: Sample was planned for collection, however it was unacceptable (possible QA/QC issue or equipment failure) NF: No Flow *: Significant difference from laboratory control MDD: Minimum Detectable Difference

	Temp	Field SC			Total Coli	E. Coli	Turb	TSS	TOC	48H Cerio		96H Fathead		96H Algae Growth		Partial Minerals (mg/L)						Total Trace Elements (ug/L)							
Date	(C)	(umhos)	pH	DO (mg/L)	MPN	MPN	(ntu)	(mg/L)	(mg/L)	Result	Control	Result	Control	Result	Control	B	Cl	SO_4	Ca	Mg	Hard	As	Cd	Cr	Cu	Pb	Ni	Zn	Hg
STC206	**Dry Creek @ La Loma Road**																												
01/23/03	11	235.0	7.4	9.8	2420	192	9.0																						
02/04/03	9	248.0	8.1	13.0	1986	61	3.7																						
02/19/03	10	231.0	7.4	8.1	816	39	1.8																						
03/05/03	9	369.0	7.5	8.8	>2420	71	1.2																						
03/18/03	13	204.0	7.6	9.9	>2420	579	19.2	5.6	NA							<0.05	11.0	8.0	15.0	7.9	69	<4.0	<0.1	<1.0	3.4	<5.0	<5.0	3.3	<0.2
04/02/03	15	184.0	7.6	9.4	>2420	1120	20.8	14.0	5.4																				
04/16/03	15	131.0	7.3	8.8	>2420	196	25.7	16.0	8.4							<0.05	7.1	3.7	9.5	4.6	43	<4.0	<0.1	<1.0	5.2	<5.0	<5.0	7.0	<0.2
05/06/03	16	127.0	7.3	8.3	>2420	133	17.9	NA	6.9																				
05/21/03	20	122.0	7.2	7.5	>2420	228	33.3	NA	7.3							<0.05	5.2	3.9	8.8	4.6	41	<4.0	<0.1	1.1	5.0	<5.0	<5.0	8.0	<0.2
06/04/03	24	115.0	7.6	7.2	>2420	152	36.2	24.0	11.0																				
06/17/03	24	113.0	7.3	8.1	>2420	144	34.4	24.0	7.4							<0.05	4.4	3.5	9.0	4.4	41	<4.0	<0.1	<1.0	5.1	<5.0	<5.0	7.2	<0.2
06/30/03	23	104.0	7.5	7.2	>2420	261	24.2	18.0	7.9							<0.05	4.2	3.3	8.4	4.0	38	<4.0	<0.1	<1.0	3.1	<5.0	<5.0	4.2	<0.2
07/23/03	26	119.0	7.5	7.0	>2420	119	10.1																						
08/05/03	23	116.0	7.4	8.7	>2420	248	23.6																						
08/20/03	23	132.0	7.2	6.0	>2420	921	17.1																						
09/09/03	20	110.0	7.4	7.6	>2420	291	26.4																						
09/22/03	20	116.0	7.4	7.6	>2420	88	19.9																						
10/07/03	18	98.0	7.6	8.0	>2420	115	7.7																						
10/21/03	16	139.0	7.5	7.2	>2420	435	6.8																						
11/04/03	10	114.0	7.4	9.6	>2420	>2420	18.2																						
11/17/03	13	138.0	7.3	8.5	>2420	50	7.0																						
01/06/04	6	214.0	7.7	16.0	>2420	>2420	53.6																						
02/04/04	10	119.0	7.7	12.3	>2420	921	25.0																						
02/18/04	12	99.0	7.6	11.7	>2420	1300	22.0																						
03/03/04	11	164.0	7.9	10.6	>2420	1733	NA																						
03/17/04	16	222.0	8.0	9.0	1046	68	4.3																						
Count	**26**	**26**	**26**	**26**	**26**	**26**	**25**	**6**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**6**	**98.0**	**7.2**	**6.0**	**816**	**39**	**1.2**	**5.6**	**5.4**							**<0.05**	**4.2**	**3.3**	**8.4**	**4.0**	**38**	**<4.0**	**<0.1**	**<1.0**	**3.1**	**<5.0**	**<5.0**	**3.3**	**<0.2**
Mean	**16**	**157.0**	**7.5**	**9.1**	**2356**	**556**	**18.8**	**16.9**	**7.8**							**<0.05**	**6.4**	**4.5**	**10.1**	**5.1**	**46**	**<4.0**	**<0.1**	**0.6**	**4.4**	**<5.0**	**<5.0**	**5.9**	**<0.2**
Median	**16**	**129.0**	**7.5**	**8.6**	**>2420**	**212**	**19.2**	**17.0**	**7.4**							**<0.05**	**5.2**	**3.7**	**9.0**	**4.6**	**41**	**<4.0**	**<0.1**	**0.5**	**5.0**	**<5.0**	**<5.0**	**7.0**	**<0.2**
Max	**26**	**369.0**	**8.1**	**16.0**	**>2420**	**>2420**	**53.6**	**24.0**	**11.0**							**<0.05**	**11.0**	**8.0**	**15.0**	**7.9**	**69**	**<4.0**	**<0.1**	**1.1**	**5.2**	**<5.0**	**<5.0**	**8.0**	**<0.2**
Q1	**11**	**115.3**	**7.4**	**7.6**	**2500**	**116**	**7.7**	**14.5**	**7.1**							**<0.05**	**4.4**	**3.5**	**8.8**	**4.4**	**41**	**<4.0**	**<0.1**	**0.5**	**3.4**	**<5.0**	**<5.0**	**4.2**	**<0.2**
Q3	**20**	**199.0**	**7.6**	**9.7**	**2500**	**836**	**25.0**	**22.5**	**8.2**							**<0.05**	**7.1**	**3.9**	**9.5**	**4.6**	**43**	**<4.0**	**<0.1**	**0.5**	**5.1**	**<5.0**	**<5.0**	**7.2**	**<0.2**
STC207	**Tuolumne River @ 9th Street**																												
01/23/03	11	187.0	7.6	11.0	770	42	4.2																						
02/04/03	12	190.0	8.1	11.6	397	16	2.8																						
02/19/03	13	178.0	7.6	10.3	1203	29	4.6																						
04/16/03	13	53.0	7.5	10.7	>2420	133	12.0	20.0	2.6							<0.05	3.6	2.5	4.5	2.0	20	<4.0	<0.1	<1.0	1.8	<5.0	<5.0	3.1	<0.2
Count	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Min	**11**	**53.0**	**7.5**	**10.3**	**397**	**16**	**2.8**	**20.0**	**2.6**							**<0.05**	**3.6**	**2.5**	**4.5**	**2.0**	**20**	**<4.0**	**<0.1**	**<1.0**	**1.8**	**<5.0**	**<5.0**	**3.1**	**<0.2**
Mean	**12**	**152.0**	**7.7**	**10.9**	**1218**	**55**	**5.9**																						
Median	**13**	**182.5**	**7.6**	**10.9**	**987**	**36**	**4.4**																						
Max	**13**	**190.0**	**8.1**	**11.6**	**>2420**	**133**	**12.0**																						
Q1	**12**	**146.8**	**7.6**	**10.6**	**677**	**26**	**3.9**																						
Q3	**13**	**187.8**	**7.7**	**11.2**	**1527**	**65**	**6.5**																						
STC214	**Tuolumne River @ 7th Street**																												
03/05/03	13	176.0	7.6	10.3	328	29	4.8																						
03/18/03	15	181.0	7.6	9.8	2420	63	5.8	6.0	NA							<0.05	13.0	7.0	14.0	6.2	59	<4.0	<0.1	<1.0	1.8	<5.0	<5.0	2.0	<0.2
04/02/03	16	170.0	7.6	9.6	>2420	613	6.7	6.0	2.1																				
Count	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Min	**13**	**170.0**	**7.6**	**9.6**	**328**	**29**	**4.8**	**6.0**	**2.1**							**<0.05**	**13.0**	**7.0**	**14.0**	**6.2**	**59**	**<4.0**	**<0.1**	**<1.0**	**1.8**	**<5.0**	**<5.0**	**2.0**	**<0.2**
Mean	**15**	**175.7**	**7.6**	**9.9**	**1749**	**235**	**5.8**																						
Median	**15**	**176.0**	**7.6**	**9.8**	**2420**	**63**	**5.8**																						
Max	**16**	**181.0**	**7.6**	**10.3**	**>2420**	**613**	**6.7**	**6.0**																					
Q1	**14**	**173.0**	**7.6**	**9.7**	**1374**	**46**	**5.3**	**6.0**																					
Q3	**16**	**178.5**	**7.6**	**10.0**	**2460**	**338**	**6.3**	**6.0**																					

NA: Sample was planned for collection, however it was unacceptable (possible QA/QC issue or equipment failure) NF: No Flow *: Significant difference from laboratory control MDD: Minimum Detectable Difference

	Temp	Field SC			Total Coli	E. Coli	Turb	TSS	TOC	48H Cerio		96H Fathead		96H Algae Growth		Partial Minerals (mg/L)						Total Trace Elements (ug/L)							
Date	(C)	(umhos)	pH	DO (mg/L)	MPN	MPN	(ntu)	(mg/L)	(mg/L)	Result	Control	Result	Control	Result	Control	B	Cl	SO_4	Ca	Mg	Hard	As	Cd	Cr	Cu	Pb	Ni	Zn	Hg
STC215	**Tuolumne River @ Audie Peeples Fishing Access**																												
05/06/03	16	103.0	7.4	9.5	2420	60	6.6	NA																					
05/21/03	21	174.0	7.6	9.1	>2420	133	4.6	NA	2.5							<0.05	11.0	6.9	13.0	5.8	57	<4.0	<0.1	<1.0	1.3	<5.0	<5.0	<2.0	<0.2
06/04/03	25	146.0	7.6	8.5	>2420	104	6.5	6.8	3.4																				
06/17/03	26	161.0	7.6	9.9	>2420	102	6.8	NA	2.9							<0.05	10.0	6.3	12.0	5.3	53	<4.0	<0.1	<1.0	1.1	<5.0	<5.0	<2.0	<0.2
06/30/03	24	126.0	7.6	7.5	>2420	205	9.3	11.0	2.9							<0.05	7.9	4.9	9.8	4.2	42	<4.0	<0.1	<1.0	1.6	<5.0	<5.0	<2.0	<0.2
07/23/03	26	127.0	7.6	7.7	>2420	130	6.2																						
08/05/03	24	126.0	7.6	9.4	>2420	172	6.3																						
08/20/03	24	142.0	7.5	7.3	>2420	613	9.2																						
09/09/03	21	137.0	7.5	8.0	>2420	74	8.4																						
09/22/03	21	140.0	7.6	8.6	>2420	50	13.9																						
10/07/03	19	149.0	7.8	8.5	>2420	64	2.1																						
10/21/03	16	92.0	7.4	9.3	>2420	83	4.0																						
11/04/03	12	145.0	7.6	10.1	>2420	88	2.8																						
11/17/03	14	167.0	7.6	NA	>2420	38	1.7																						
01/06/04	9	175.0	8.4	15.7	1414	186	12.6																						
01/20/04	11	179.0	7.8	11.8	1120	43	12.3																						
02/04/04	11	170.0	7.8	14.2	>2420	56	7.9																						
02/18/04	13	140.0	7.7	12.3	>2420	461	15.6																						
03/03/04	13	183.0	7.8	10.2	>2420	240	NA																						
03/17/04	14	65.0	8.0	11.0	649	27	8.3																						
Count	**20**	**20**	**20**	**19**	**20**	**20**	**19**	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
Min	**9**	**65.0**	**7.4**	**7.3**	**649**	**27**	**1.7**	**6.8**	**2.5**							**<0.05**	**7.9**	**4.9**	**9.8**	**4.2**	**42**	**<4.0**	**<0.1**	**<1.0**	**1.1**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**18**	**142.4**	**7.7**	**9.9**	**2280**	**146**	**7.6**		**2.9**							**<0.05**	**9.6**	**6.0**	**11.6**	**5.1**	**51**	**<4.0**	**<0.1**	**<1.0**	**1.3**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Median	**18**	**143.5**	**7.6**	**9.4**	**>2420**	**95**	**6.8**		**2.9**							**<0.05**	**10.0**	**6.3**	**12.0**	**5.3**	**53**	**<4.0**	**<0.1**	**<1.0**	**1.3**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Max	**26**	**183.0**	**8.4**	**15.7**	**>2420**	**613**	**15.6**	**11.0**	**3.4**							**<0.05**	**11.0**	**6.9**	**13.0**	**5.8**	**57**	**<4.0**	**<0.1**	**<1.0**	**1.6**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q1	**13**	**126.8**	**7.6**	**8.5**	**2500**	**59**	**5.4**	**7.9**	**2.8**							**<0.05**	**9.0**	**5.6**	**10.9**	**4.8**	**48**	**<4.0**	**<0.1**	**<1.0**	**1.2**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q3	**24**	**167.8**	**7.8**	**10.6**	**2500**	**176**	**9.3**	**10.0**	**3.0**							**<0.05**	**10.5**	**6.6**	**12.5**	**5.6**	**55**	**<4.0**	**<0.1**	**<1.0**	**1.5**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
STC513	**Tuolumne River @ Shiloh Fishing Access**																												
01/22/03	12	260.0	8.2	11.2	602	31	5.8																						
01/29/03	13	228.0	7.7	10.2			9.9			100	100	100	100	4.44*	3.28	<0.05													
02/04/03	11	240.0	8.1	11.1	291	19	3.2																						
02/19/03	12	236.0	7.9	10.5	921	39	7.0																						
03/05/03	13	240.0	7.7	11.0	285	30	2.6																						
03/18/03	15	216.0	7.9	9.0	>2420	104	46.8	9.2	NA							<0.05	15.0	8.2	17.0	7.2	71	<4.0	<0.1	<1.0	2.5	<5.0	<5.0	3.3	<0.2
03/25/03	16	217.0	8.0	10.0			5.7		2.4	100	100	NA	NA	4.59*	2.96														
04/02/03	17	205.0	8.2	9.7	>2420	649	18.5	6.8																					
04/16/03	14	58.0	7.5	10.1	>2420	345	15.8	14.0	2.7	100	100	100	100	1.72* MDD 3%	1.90	<0.05	3.0	2.7	4.8	2.1	21	<4.0	<0.1	<1.0	2.1	<5.0	<5.0	3.1	<0.2
05/06/03	17	114.0	8.2	9.8	1011	96	8.8	NA	2.4																				
05/21/03	22	207.0	7.6	9.2	>2420	107	5.6	NA	2.2	100	100	100	100	4.5* MDD 20%	2.01	<0.05	15.0	8.5	15.0	6.7	66	<4.0	<0.1	<1.0	2.1	<5.0	<5.0	<2.0	<0.2
06/04/03	24	168.0	7.6	8.1	>2420	517	26.3	32.0	3.7																				
06/17/03	24	182.0	7.6	9.1	>2420	53	7.2	8.0	2.5							<0.05	13.0	7.0	13.0	5.6	56	<4.0	<0.1	<1.0	1.5	<5.0	<5.0	<2.0	<0.2
06/30/03	26	158.0	7.9	8.1	>2420	78	6.9	6.4	3.0							<0.05	10.0	5.8	12.0	5.0	50	<4.0	<0.1	<1.0	1.8	<5.0	<5.0	<2.0	<0.2
07/23/03	26	163.0	7.6	7.8	>2420	69	4.1																						
08/05/03	23	151.0	7.6	9.6	>2420	179	4.2																						
08/20/03	24	164.0	7.7	8.1	>2420	59	5.0																						
09/09/03	21	173.0	7.7	8.3	>2420	79	6.0																						
09/22/03	22	165.0	7.6	8.5	>2420	147	4.9																						
10/07/03	20	173.0	8.0	8.9	>2420	43	12.4																						
10/21/03	17	106.0	7.7	8.7	>2420	71	4.8																						
11/04/03	13	185.0	7.8	10.9	>2420	70	10.0																						
11/17/03	14	205.0	7.9	10.5	>2420	25	3.8																						
01/06/04	8	200.0	7.7	12.4	>2420	206	13.6																						
01/29/04	12	199.0	8.0	12.4	179	8	12.4																						
02/26/04	13	149.0	7.9	10.0	>2420	488	NA																						
03/24/04	15	67.0	7.8	10.1	1733	54	NA																						
Count	**27**	**27**	**27**	**27**	**25**	**25**	**25**	**6**	**7**	**4**	**4**	**4**	**4**	**4**	**4**	**6**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**8**	**58.0**	**7.5**	**7.8**	**179**	**8**	**2.6**	**6.4**	**2.2**							**<0.05**	**3.0**	**2.7**	**4.8**	**2.1**	**21**	**<4.0**	**<0.1**	**<1.0**	**1.5**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**17**	**178.9**	**7.8**	**9.8**	**2001**	**143**	**10.1**	**12.7**	**2.7**							**<0.05**	**11.2**	**6.4**	**12.4**	**5.3**	**53**	**<4.0**	**<0.1**	**<1.0**	**2.0**	**<5.0**	**<5.0**	**1.9**	**<0.2**
Median	**16**	**182.0**	**7.8**	**9.8**	**>2420**	**71**	**6.9**	**8.6**	**2.5**							**<0.05**	**13.0**	**7.0**	**13.0**	**5.6**	**56**	**<4.0**	**<0.1**	**<1.0**	**2.1**	**<5.0**	**<5.0**	**1.0**	**<0.2**
Max	**26**	**260.0**	**8.2**	**12.4**	**>2420**	**649**	**46.8**	**32.0**	**3.7**							**<0.05**	**15.0**	**8.5**	**17.0**	**7.2**	**71**	**<4.0**	**<0.1**	**<1.0**	**2.5**	**<5.0**	**<5.0**	**3.3**	**<0.2**
Q1	**13**	**160.5**	**7.7**	**8.8**	**1733**	**43**	**4.9**	**7.1**	**2.4**							**<0.05**	**10.0**	**5.8**	**12.0**	**5.0**	**50**	**<4.0**	**<0.1**	**<1.0**	**1.8**	**<5.0**	**<5.0**	**1.0**	**<0.2**
Q3	**22**	**211.5**	**8.0**	**10.5**	**2500**	**147**	**12.4**	**12.8**	**2.9**							**<0.05**	**15.0**	**8.2**	**15.0**	**6.7**	**66**	**<4.0**	**<0.1**	**<1.0**	**2.1**	**<5.0**	**<5.0**	**3.1**	**<0.2**
MERCED WATERSHED																													
MAR202	**Merced River @ Briceburg**																												
02/18/03	NA	NA	NA	NA	NA	NA	NA																						
03/04/03	8	71.0	7.9	11.9	11	2	1.7																						
03/19/03	7	90.0	7.7	12.2	8	2	0.4	<5.0	1.5							<0.05	3.1	6.0	10.0	3.0	37	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
04/01/03	10	21.0	7.9	11.5	50	16	2.9	4.0	1.4																				
Count	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Min	**7**	**21.0**	**7.7**	**11.5**	**8**	**2**	**0.4**	**<5.0**	**1.4**							**<0.05**	**3.1**	**6.0**	**10.0**	**3.0**	**37**	**<4.0**	**<0.1**	**<1.0**	**<1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**8**	**60.7**	**7.8**	**11.9**	**23**	**7**	**1.7**																						
Median	**8**	**71.0**	**7.9**	**11.9**	**11**	**2**	**1.7**																						
Max	**10**	**90.0**	**7.9**	**12.2**	**50**	**16**	**2.9**	**4.0**	**1.5**																				
Q1	**8**	**46.0**	**7.8**	**11.7**	**10**	**2**	**1.1**	**2.9**	**1.4**																				
Q3	**9**	**80.5**	**7.9**	**12.1**	**31**	**9**	**2.3**	**3.6**	**1.5**																				

NA: Sample was planned for collection, however it was unacceptable (possible QA/QC issue or equipment failure) NF: No Flow *: Significant difference from laboratory control MDD: Minimum Detectable Difference

Date	Temp (C)	Field SC (umhos)	pH	DO (mg/L)	Total Coli MPN	E. Coli MPN	Turb (ntu)	TSS (mg/L)	TOC (mg/L)	48H Cerio Result	48H Cerio Control	96H Fathead Result	96H Fathead Control	96H Algae Growth Result	96H Algae Growth Control	Partial Minerals (mg/L) B	Cl	SO_4	Ca	Mg	Hard	Total Trace Elements (ug/L) As	Cd	Cr	Cu	Pb	Ni	Zn	Hg
MAR203	**Merced River @ Bagby**																												
04/15/03	8	47.0	7.8	12.2	436	17	5.1	<4.0	2.8							<0.05	2.1	3.6	5.1	1.2	18	<4.0	<0.1	<1.0	1.1	<5.0	<5.0	<2.0	<0.2
05/07/03	10	38.0	7.5	11.3	10	4	0.6	NA	1.9																				
05/20/03	12	15.0	7.4	11.5	103	33	10.1	12.0	2.3							<0.05	NA	NA	1.5	0.3	5	<4.0	<0.1	<1.0	1.6	<5.0	<5.0	<2.0	<0.2
06/03/03	15	10.0	7.7	10.2	172	18	11.0	12.0	4.3																				
06/18/03	21	18.0	6.5	6.4	>2420	517	3.4	4.8	2.5							<0.05	<2.0	<2.0	1.9	0.4	6	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
06/30/03	24	27.0	7.0	7.0	>2420	50	4.5	<4.0	1.4							<0.05	2.0	<2.0	2.8	0.6	10	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
07/22/03	24	30.0	7.6	8.3	>2420	11	1.3																						
08/06/03	23	36.0	7.6	8.6	>2420	4	1.2																						
08/19/03	24	57.0	7.8	8.5	>2420	4	0.6																						
09/10/03	21	57.0	7.9	9.0	>2420	1	0.4																						
09/24/03	20	74.0	7.8	9.1	>2420	4	0.5																						
10/08/03	20	85.0	7.9	9.6	1986	5	0.9																						
10/22/03	16	91.0	7.6	10.0	1203	3	NA																						
11/05/03	10	91.0	7.7	11.8	649	2	0.5																						
11/19/03	11	92.0	7.8	11.1	2420	5	0.4																						
01/07/04	5	73.0	7.7	13.8	344	5	1.2																						
Count	**16**	**16**	**16**	**16**	**16**	**16**	**15**	**5**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**3**	**3**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**
Min	**5**	**10.0**	**6.5**	**6.4**	**10**	**1**	**0.4**	**<4.0**	**1.4**							**<0.05**	**<2.0**	**<2.0**	**1.5**	**0.3**	**5**	**<4.0**	**<0.1**	**<1.0**	**<1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**17**	**52.6**	**7.6**	**9.9**	**1551**	**43**	**2.8**	**6.6**	**2.5**							**<0.05**	**1.7**	**1.9**	**2.8**	**0.6**	**10**	**<4.0**	**<0.1**	**<1.0**	**0.9**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Median	**18**	**52.0**	**7.7**	**9.8**	**2203**	**5**	**1.2**	**4.8**	**2.4**							**<0.05**	**2.0**	**1.0**	**2.4**	**0.5**	**8**	**<4.0**	**<0.1**	**<1.0**	**0.8**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Max	**24**	**92.0**	**7.9**	**13.8**	**>2420**	**517**	**11.0**	**12.0**	**4.3**							**<0.05**	**2.1**	**3.6**	**5.1**	**1.2**	**18**	**<4.0**	**<0.1**	**<1.0**	**1.6**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q1	**11**	**29.3**	**7.6**	**8.6**	**413**	**4**	**0.6**	**2.0**	**2.0**							**<0.05**	**1.5**	**1.0**	**1.8**	**0.4**	**6**	**<4.0**	**<0.1**	**<1.0**	**0.5**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q3	**22**	**76.8**	**7.8**	**11.4**	**2500**	**17**	**4.0**	**12.0**	**2.7**							**<0.05**	**2.1**	**2.3**	**3.4**	**0.8**	**12**	**<4.0**	**<0.1**	**<1.0**	**1.2**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
MAR201	**Merced River @ Highway 49**																												
01/21/03	NA	NA	NA	NA	NA	NA	NA																						
01/22/03	8	35.0	7.5	13.6	123	<1	0.4																						
02/05/03	6	40.0	8.0	12.6	5	2	0.4																						
Count	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Min	**6**	**35.0**	**7.5**	**12.6**	**5**	**<1**	**0.4**																						
Mean																													
Median																													
Max	**8**	**40.0**	**8.0**	**13.6**	**123**	**2**	**0.4**																						
Q1	**6**	**36.3**	**7.6**	**12.9**	**35**	**1**	**0.4**																						
Q3	**7**	**38.8**	**7.9**	**13.4**	**94**	**2**	**0.4**																						
MER209	**Merced River @ Merced Falls**																												
01/21/03	NA	NA	NA	NA	NA	NA	NA																						
01/22/03	11	60.0	7.5	12.3	488	12	2.7																						
02/05/03	11	56.0	7.7	11.8	107	9	2.3																						
02/18/03	13	55.0	8.1	11.6	579	4	2.1																						
03/04/03	13	50.0	7.7	11.0	88	5	1.8																						
03/19/03	13	48.0	7.5	11.3	84	19	1.9	<5.0	1.5							<0.05	2.6	3.1	4.8	1.5	18	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
04/01/03	13	49.0	7.7	10.9	199	10	2.1	<4.0	1.1																				
04/15/03	11	45.0	7.5	11.0	687	36	2.5	<4.0	2.0							<0.05	2.4	3.2	4.6	1.3	17	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
05/07/03	11	48.0	7.6	10.7	93	14	3.0	NA	2.3																				
05/20/03	13	50.0	7.3	10.8	158	16	1.9	<4.0	1.6							<0.05	NA	NA	4.7	1.5	18	<4.0	<0.1	<1.0	1.1	<5.0	<5.0	<2.0	<0.2
06/03/03	13	48.0	7.6	10.0	225	24	2.0	<4.0	3.2																				
06/18/03	14	47.0	7.6	11.0	866	15	1.2	<4.0	1.7							<0.05	2.1	3.1	4.8	1.4	18	<4.0	<0.1	<1.0	1.1	<5.0	<5.0	<2.0	<0.2
06/30/03	14	34.0	7.4	10.7	2420	10	1.1	<4.0	2.2							<0.05	2.4	2.9	4.6	1.4	17	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
07/22/03	14	43.0	7.4	10.5	921	49	1.4																						
08/06/03	15	35.0	7.5	10.2	1203	18	1.2																						
08/19/03	15	30.0	7.5	10.4	1733	10	1.3																						
09/10/03	15	28.0	7.2	9.9	1986	21	1.7																						
09/24/03	16	28.0	7.4	9.9	1986	22	1.4																						
10/08/03	16	26.0	7.1	10.5	1553	13	1.4																						
10/22/03	14	25.0	7.0	10.7	980	16	NA																						
11/05/03	13	26.0	7.5	9.9	378	15	2.1																						
11/19/03	13	26.0	7.5	10.3	185	4	2.8																						
01/07/04	10	40.0	7.6	12.4	687	4	2.5																						
Count	**22**	**22**	**22**	**22**	**22**	**22**	**21**	**7**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**4**	**4**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**10**	**25.0**	**7.0**	**9.9**	**84**	**4**	**1.1**	**<4.0**	**1.1**							**<0.05**	**2.1**	**2.9**	**4.6**	**1.3**	**17**	**<4.0**	**<0.1**	**<1.0**	**<1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**13**	**40.8**	**7.5**	**10.8**	**800**	**16**	**1.9**	**2.1**	**2.0**							**<0.05**	**2.4**	**3.1**	**4.7**	**1.4**	**18**	**<4.0**	**<0.1**	**<1.0**	**0.7**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Median	**13**	**44.0**	**7.5**	**10.7**	**633**	**15**	**1.9**	**<4.0**	**1.9**							**<0.05**	**2.4**	**3.1**	**4.7**	**1.4**	**18**	**<4.0**	**<0.1**	**<1.0**	**0.5**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Max	**16**	**60.0**	**8.1**	**12.4**	**2420**	**49**	**3.0**	**<5.0**	**3.2**							**<0.05**	**2.6**	**3.2**	**4.8**	**1.5**	**18**	**<4.0**	**<0.1**	**<1.0**	**1.1**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q1	**13**	**28.5**	**7.4**	**10.3**	**189**	**10**	**1.4**	**2.0**	**1.6**							**<0.05**	**2.3**	**3.1**	**4.6**	**1.4**	**17**	**<4.0**	**<0.1**	**<1.0**	**0.5**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q3	**14**	**48.8**	**7.6**	**11.0**	**1147**	**19**	**2.3**	**2.0**	**2.2**							**<0.05**	**2.5**	**3.1**	**4.8**	**1.5**	**18**	**<4.0**	**<0.1**	**<1.0**	**1.1**	**<5.0**	**<5.0**	**<2.0**	**<0.2**

NA: Sample was planned for collection, however it was unacceptable (possible QA/QC issue or equipment failure) NF: No Flow *: Significant difference from laboratory control MDD: Minimum Detectable Difference

	Temp	Field SC			Total Coli	E. Coli	Turb	TSS	TOC	48H Cerio		96H Fathead		96H Algae Growth		Partial Minerals (mg/L)						Total Trace Elements (ug/L)							
Date	(C)	(umhos)	pH	DO (mg/L)	MPN	MPN	(ntu)	(mg/L)	(mg/L)	Result	Control	Result	Control	Result	Control	B	Cl	SO_4	Ca	Mg	Hard	As	Cd	Cr	Cu	Pb	Ni	Zn	Hg
MER202	**Merced River @ Highway 99**																												
01/22/03	11	101.0	7.3	11.7	345	13	5.3																						
02/05/03	11	108.0	7.6	11.6	387	55	2.7																						
02/19/03	12	95.0	7.7	10.1	1300	15	9.1																						
03/05/03	12	91.0	7.9	10.1	411	19	3.2																						
03/18/03	15	80.0	7.6	9.8	1120	57	3.0	<4.0	NA							<0.05	3.9	4.7	7.2	2.4	28	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
04/02/03	16	18.0	7.5	9.8	2420	78	4.9	<4.0	1.5																				
04/16/03	14	54.0	7.7	10.0	1986	58	5.9	8.0	2.8							<0.05	2.6	3.0	5.1	1.7	20	<4.0	<0.1	<1.0	1.7	<5.0	<5.0	<2.0	<0.2
05/06/03	15	49.0	7.5	9.9	1553	52	6.0	NA	2.9																				
05/21/03	20	82.0	7.5	9.3	1553	55	3.5	NA	2.3							<0.05	4.2	5.9	7.1	2.4	28	<4.0	<0.1	<1.0	1.7	<5.0	<5.0	<2.0	<0.2
06/04/03	26	87.0	8.3	10.6	>2420	68	3.1	<4.0	2.9																				
06/17/03	26	78.0	8.4	11.4	>2420	36	3.3	4.8	2.2							<0.05	3.8	4.5	6.8	2.3	26	<4.0	<0.1	<1.0	1.0	<5.0	<5.0	<2.0	<0.2
06/30/03	25	89.0	7.7	8.5	>2420	133	3.4	<4.0	2.7							<0.05	4.2	4.9	7.6	2.5	29	<4.0	<0.1	<1.0	1.3	<5.0	<5.0	<2.0	<0.2
07/23/03	29	95.0	7.8	9.1	>2420	67	8.1																						
08/05/03	26	85.0	7.7	10.3	>2420	52	3.7																						
08/20/03	27	91.0	7.7	8.9	>2420	79	4.7																						
09/09/03	23	95.0	7.3	6.7	>2420	88	9.1																						
09/22/03	23	91.0	7.2	7.3	>2420	84	1385.0																						
10/07/03	20	73.0	7.6	7.7	2420	48	5.3																						
10/21/03	17	30.0	7.6	9.1	>2420	84	9.1																						
11/04/03	12	53.0	7.8	10.4	>2420	23	3.2																						
11/17/03	14	81.0	7.5	12.3	1300	29	3.0																						
01/06/04	8	84.0	8.0	16.7	1203	86	7.1																						
Count	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**6**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**8**	**18.0**	**7.2**	**6.7**	**345**	**13**	**2.7**	**<4.0**	**1.5**							**<0.05**	**2.6**	**3.0**	**5.1**	**1.7**	**20**	**<4.0**	**<0.1**	**<1.0**	**<1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**18**	**77.7**	**7.7**	**10.1**	**1864**	**58**	**67.8**	**3.5**	**2.5**							**<0.05**	**3.7**	**4.6**	**6.8**	**2.3**	**26**	**<4.0**	**<0.1**	**<1.0**	**1.2**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Median	**17**	**84.5**	**7.7**	**10.0**	**2420**	**56**	**4.8**	**2.0**	**2.7**							**<0.05**	**3.9**	**4.7**	**7.1**	**2.4**	**28**	**<4.0**	**<0.1**	**<1.0**	**1.3**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Max	**29**	**108.0**	**8.4**	**16.7**	**>2420**	**133**	**1385.0**	**8.0**	**2.9**							**<0.05**	**4.2**	**5.9**	**7.6**	**2.5**	**29**	**<4.0**	**<0.1**	**<1.0**	**1.7**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q1	**13**	**74.3**	**7.5**	**9.1**	**1300**	**39**	**3.2**	**2.0**	**2.3**							**<0.05**	**3.8**	**4.5**	**6.8**	**2.3**	**26**	**<4.0**	**<0.1**	**<1.0**	**1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q3	**25**	**91.0**	**7.8**	**10.6**	**2500**	**79**	**6.8**	**4.1**	**2.9**							**<0.05**	**4.2**	**4.9**	**7.2**	**2.4**	**28**	**<4.0**	**<0.1**	**<1.0**	**1.7**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
MER546	**Merced River @ River Road**																												
01/22/03	11	173.0	7.4	11.5	770	23	5.1																						
01/29/03	13	177.0	7.8	10.6			25.0			100	100	95	100	4.86*	3.28	<0.05													
02/05/03	11	130.0	7.6	11.3	613	50	7.2																						
02/20/03	11	176.0	8.0	11.2	816	119	5.5																						
03/06/03	15	178.0	7.9	13.0	387	30	3.9																						
03/20/03	16	151.0	7.9	9.9	1046	31	7.9	NA	1.7							NA	NA	NA	NA	NA	NA	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
03/25/03	17	135.0	8.0	10.2			15.9			100	100	NA	NA	4.16*	2.96														
04/03/03	16	141.0	7.4	10.0	1414	76	9.5	NA	NA																				
04/17/03	15	64.0	8.4	9.8	>2420	84	12.8	14.0	3.2	100	100	100	100	1.73* MDD 4%	1.84	<0.05	3.1	3.4	5.7	1.9	22	<4.0	<0.1	<1.0	1.9	<5.0	<5.0	<2.0	<0.2
05/08/03	15	52.0	7.6	9.6	>2420	77	11.6	NA	2.9																				
05/22/03	23	162.0	7.5	8.3	>2420	69	6.4	5.6	2.0	100	100	85	100	4.24* MDD 59%	2.08	<0.05	11.0	9.4	13.0	4.3	50	<4.0	<0.1	<1.0	1.8	<5.0	<5.0	<2.0	<0.2
06/05/03	25	249.0	7.8	8.2	>2420	387	6.2	8.4	3.8																				
06/19/03	24	261.0	7.7	8.6	>2420	166	6.0	6.0	2.3							<0.05	23.0	15.0	18.0	5.8	68	<4.0	<0.1	<1.0	1.6	<5.0	<5.0	<2.0	<0.2
06/30/03	25	215.0	7.6	7.9	>2420	727	14.9	16.0	2.5							<0.05	16.0	13.0	17.0	5.6	65	<4.0	<0.1	<1.0	1.6	<5.0	<5.0	<2.0	<0.2
07/24/03	27	387.0	7.6	7.5			53.2																						
07/31/03	24	416.0	7.6	8.3	>2420	138	5.6																						
08/07/03	23	323.0	7.7	8.4	>2420	236	7.3																						
08/21/03	24	284.0	7.7	8.3	>2420	291	3.2																						
08/28/03	23	409.0	7.7	8.3	>2420	461	6.3																						
09/11/03	24	262.0	7.7	8.8	>2420	204	2.7																						
09/25/03	22	358.0	7.8	8.7	>2420	115	4.3									<0.05													
10/09/03	20	226.0	7.5	8.5	>2420	179	4.8																						
10/23/03	18	37.0	7.8	9.6	>2420	411	13.5																						
10/30/03	16	118.0	7.8	9.6	NA	NA	4.3									<0.05													
11/06/03	13	102.0	7.8	10.7	>2420	33	4.7																						
11/20/03	13	124.0	8.2	10.9	1120	31	NA									<0.05													
01/08/04	9	147.0	7.8	8.5	344	47	NA																						
01/29/04	11	131.0	8.3	11.6	344	19	NA									<0.05													
02/26/04	12	124.0	7.9	10.1	2420	83	NA									<0.05													
03/24/04	19	143.0	7.6	8.9	2420	45	NA																						
Count	**30**	**30**	**30**	**30**	**26**	**26**	**25**	**5**	**7**	**4**	**4**	**4**	**4**	**4**	**4**	**10**	**4**	**4**	**4**	**4**	**4**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Min	**9.3**	**37.00**	**7.40**	**7.50**	**344**	**19**	**2.70**	**5.60**	**1.70**							**<0.05**	**3.10**	**3.40**	**5.70**	**1.90**	**22.00**	**<4.0**	**<0.01**	**<1.0**	**<1.0**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Mean	**18**	**195.17**	**7.77**	**9.56**	**1892**	**159**	**9.91**	**10.00**	**2.63**							**<0.05**	**13.28**	**10.20**	**13.43**	**4.40**	**51.25**	**<4.0**	**<0.01**	**<1.0**	**1.48**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Median	**17**	**167.50**	**7.75**	**9.57**	**>2420**	**84**	**6.30**	**8.40**	**2.50**							**<0.05**	**13.50**	**11.20**	**15.00**	**4.95**	**57.50**	**<4.0**	**<0.01**	**<1.0**	**1.60**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Max	**27**	**416.00**	**8.40**	**13.00**	**>2420**	**727**	**53.20**	**16.00**	**3.80**							**<0.05**	**23.00**	**15.00**	**18.00**	**5.80**	**68.00**	**<4.0**	**<0.01**	**<1.0**	**1.90**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q1	**13**	**130.25**	**7.60**	**8.41**	**1065**	**46**	**4.80**	**6.00**	**2.15**							**<0.05**	**9.03**	**7.90**	**11.18**	**3.70**	**43.00**	**<4.0**	**<0.01**	**<1.0**	**1.60**	**<5.0**	**<5.0**	**<2.0**	**<0.2**
Q3	**23**	**258.00**	**7.88**	**10.50**	**2500**	**198**	**11.60**	**14.00**	**3.05**							**<0.05**	**17.75**	**13.50**	**17.25**	**5.65**	**65.75**	**<4.0**	**<0.01**	**<1.0**	**1.80**	**<5.0**	**<5.0**	**<2.0**	**<0.2**

NA: Sample was planned for collection, however it was unacceptable (possible QA/QC issue or equipment failure) NF: No Flow *: Significant difference from laboratory control MDD: Minimum Detectable Difference

Appendix C:
Water Quality Objectives/Goals and Related Beneficial Use Tables

Constituent	Location/Comment	Dates	Objective		
SACRAMENTO-SAN JOAQUIN BASIN PLAN OBJECTIVES (Basin Plan, 2002)					
Numeric					
Dissolved Oxygen	(legal boundaries)[1] Cold/Spawning:	all	7.0 mg/L		
Specific Conductance	San Joaquin River at Airport Way Bridge, Vernalis; Old River at Tracy Road Bridge[3]	Apr 1- Aug 31	700 µmhos/cm		
		Sep 1- Mar 31	1000 µmhos/cm		
pH[4]	In fresh waters with designated COLD or	all	6.5 - 8.5		
Temperature[4]	Deer Creek, source to Cosumnes River. The	See Resolution R5-	Range 63-81ºF		
Turbidity	Delta waters[5]: except for periods of storm — Central Delta	all	50 NTU		
	other Delta waters	all	150 NTU		
	Sacramento River and San Joaquin River Basins[5]	all	Where natural turbidity is between:	0-5 NTU	no >1 NTU
				5-50 NTU	no >20%
				50-100 NTU	no >10 NTU
				>100 NTU	no >10%
	Deer Creek, source to Cosumnes River. The following applies to daily maximum turbidity. For daily average turbidity see Resolution R5 2003-0137 (ephemeral water body)	all	Where the dilution	<1 NTU	no >5 NTU
			Where natural	1-5 NTU	no >5 NTU
			Where the dilution	>5 NTU	General turbidity
Narrative					
pH[4]	Sacramento River and San Joaquin River Basins	all	Changes in normal ambient pH levels shall not exceed 0.5 in fresh waters with designated COLD or WARM beneficial uses.		
Temperature[4]	Sacramento River and San Joaquin River Basins	all	At no time or place shall the temperature of intrastate waters be increased more than 5 ºF above natural receiving water temperature.		
Toxicity	Sacramento River and San Joaquin River Basins	all	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.		
TSS	Sacramento River and San Joaquin River Basins	all	The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.		
SACRAMENTO-SAN JOAQUIN BASIN PLAN OBJECTIVES (Title 22 of the California code of regulations, which are incorporated by reference into the Sacramento-San Joaquin Basin Plan Objectives*)					
Arsenic (Total)	Water Bodies Designated as Municipal and Domestic Supply (MUN)-Drinking Water. California Primary MCL	all	50 µg/L		
Cadmium (Total)		all	5 µg/L		
Chloride		all	Maximum Contaminant Level Ranges	Recommended	250 mg/L
				Upper	500 mg/L
				Short Term	600 mg/L
Chromium (Total)		all	50 µg/L		
Copper (Total)[7]		all	1000 µg/L		
Lead (Total)		all	15 µg/L		
Mercury (Total)		all	2 µg/L		
Nickel (Total)		all	100 µg/L		
Specific Conductance		all	Maximum Contaminant Level Ranges	Recommended	900 µmhos/cm
				Upper	1600 µmhos/cm
				Short Term	2200 µmhos/cm
Sulfate		all	Maximum Contaminant Level Ranges	Recommended	250 mg/L
				Upper	500 mg/L
				Short Term	600 mg/L
Turbidity		all	5 NTU		
Zinc (Total)[7]		all	5000 µg/L		
BAY-DELTA AUTHORITY TARGETS (CALFED Water Quality Program Plan, 2000)					
Mercury	East of Antioch Bridge	All	2.1 µg/L		
Temperature[6]	San Joaquin River at Vernalis	April 1 - Jun 30 and	<68 ºF		
TOC	Source water quality for the Delta	all	3.0 mg/L		

*Title 22 of the California code of regulations, which are incorporated by reference into the Sacramento-San Joaquin Basin Plan Objectives: Table 64431-A (Inorganic Chemicals), Table 64449-A (Secondary Maximum contaminant Levels-consumer Acceptance Limits) and Table 64449-B (Secondary Maximum Contaminant Levels-Ranges). Lead is stated in Article 19, Section 64468.1 and also in the Basin plan (III-3). Use the following objectives unless otherwise stated above.

[1] Apply most limiting.

[2] Spawning was used in areas designated as WARM and SPAWNING (Applied most limiting)

[3] Maximum 30-day running average of mean daily, in µmhos/cm

[4] Contains narrative and Numeric. Apply most limiting.

[5] Exceptions to the following limit will be considered when a dredging operation can cause an increase in turbidity.

[6] Daily average temperature in all water-year t

[7] The effects of these concentrations were measured by exposing test organisms to dissolved aqueous solutions of 40 mg/L hardness that had been filtered through a 0.45 micron membrane filter. Where deviations from 40 mg/L of water hardness occur, the objectives, in mg/L, shall be determined using the following formulas: (As hardness increases Cu and Zn increase)

$$Cu = e^{(0.905)(\ln \text{hardness})-1.612} \times 10^{-3}$$

Indicator(s)	Units	SJR-BENEFICIAL USE(S)			
		Drinking Water	Aquatic Life	Irrig. Water Supply	Rec. Use
Arsenic (total)	µg/L	0.004[f] 10[k]		100[a]	
Boron (total)	mg/L	0.04		0.7[a]	
Cadmium (total)	µg/L	0.04[f]	1.6[j]	10[a]	
Chloride	mg/L		860[c]	106[a]	
Copper (total)	µg/L	1300[b] 170[f]	5.9[d]	200[a]	
E. coli	MPN/100mL				235[l] 298[m] 409[n] 575[o]
Specific Conductance	µmhos/cm			700[a]	
Lead (total)	µg/L	2[f]	25.4[e]	5000[a]	
Mercury (total)	µg/L	0.05[b] 1.2[f]	1.4[c]		
Nickel (total)	µg/L	610[b] 12[f]	216.1[g]	200[a]	
Zinc (total)	µg/L	2100[l]	55.1[h]	2000[a]	

[a] Water Quality for Agriculture (Ayers & Westcot)

[b] California Toxics Rule (USEPA) for sources of drinking water

[c] USEPA National Ambient W Q Criteria / 1-hour average

[d] California Toxics Rule (USEPA): The concluding concentration was determined by using a 40 mg/L hardness. Where deviations from 40 mg/L of water hardness occur, the goals, in mg/L, shall be determined using the following formulas: (As hardness increases copper increases)

Maximum concentration (1-hour Average, total recoverable) =(e(0.9422*LN(hardness)-1.700))

Maximum concentration (1-hour Average, dissolved) =(e(0.9422*LN(hardness)-1.700))*(0.960)

[e] California Toxics Rule (USEPA): The concluding concentration was determined by using a 40 mg/L hardness. Where deviations from 40 mg/L of water hardness occur, the goals, in mg/L, shall be determined using the following formulas: (As hardness increases lead increases)

Maximum concentration (1-hour Average, dissolved) =(e(1.273*LN(hardness)-1.460))*(1.46203-(LN(hardness)*0.145712))

Maximum concentration (1-hour Average, total recoverable) =(e(1.273*LN(hardness)-1.460))

[f] California Public Health Goal for Drinking Water

[g] California Toxics Rule (USEPA): The concluding concentration was determined by using a 40 mg/L hardness. Where deviations from 40 mg/L of water hardness occur, the goals, in mg/L, shall be determined using the following formulas: (As hardness increases nickel increases)

Maximum concentration(1-hour Average, dissolved)=e(0.8460*LN(hardness)+2.255))*(0.998)

Maximum concentration(1-hour Average, total recoverable)=e(0.8460*LN(hardness)+2.255)

[h] California Toxics Rule (USEPA): The concluding concentration was determined by using a 40 mg/L hardness. Where deviations from 40 mg/L of water hardness occur, the goals, in mg/L, shall be determined using the following formulas: (As hardness increases zinc increases)

Maximum concentration (1-hour Average, total recoverable)=(e(0.8473*LN(hardness)+0.884))

Maximum concentration(1-hour Average, dissolved)=(e(0.8473*LN(A13)+0.884))*(0.978)

[i] USEPA IRIS Reference Dose (Assumes 70 kg body weight, 2 liters per day drinking water consumption, and 20 percent relative source contribution. An additional uncertainty factor of 10 is used for Class C carcinogens.)

[j] California Toxics Rule (USEPA): The concluding concentration was determined by using a 40 mg/L hardness. Where deviations from 40 mg/L of water hardness occur, the goals, in mg/L, shall be determined using the following formulas: (As hardness increases cadmium increases)

Maximum concentration (1-hour Average, dissolved) =(exp(1.128*LN(hardness)-3.6867))*(1.136672-(LN(hardness)*0.041838))

Maximum concentration (1 hour Average, total recoverable) =(exp(1.128*LN(hardness)-3.6867))

[k] USEPA Primary MCL

[l] USEPA Guideline - Single Sample Maximum Allowable Density: designated Beach Area (upper 75% C.L.)

[m] USEPA Guideline - Single Sample Maximum Allowable Density: moderate full body contact recreation (upper 82% C.L.)

[n] USEPA Guideline - Single Sample Maximum Allowable Density: lightly used full body contact recreation (upper 90% C.L.)

[o] USEPA Guideline - Single Sample Maximum Allowable Density: infrequently used full body contact recreation (upper 95% C.L.)

Site Description	Site ID	Applicable Basin Plan Objective Surface Water Body Designation	MUN	AGRI-CULTURE		INDUSTRY			RECREATION			FRESHWATER HABITAT		MIGRATION		SPAWNING		WILD	Designated (D) or Tributary (T)
				AGR					REC-1		REC-2	WARM	COLD	MIGR		SPWN			
			Municipal and Domestic	Irrigation	Stock Watering	Process	Service Supply	Power	Contact	Canoeing and Rafting	Other Noncontact	Warm	Cold	Warm	Cold	War	Cold	Wildlife Habitat	
FARMINGTON DRAINAGE AREA																			
Littlejohns Creek at Sonora Road	STC212	C	E	E	E	E	E		E		E	E	E	E	E	E		E	T
Duck Creek at Highway 4	SJC201	C	E	E	E	E	E		E		E	E	E	E	E	E		E	T
Littlejohns Creek at Austin Road	SJC213	C	E	E	E	E	E		E		E	E	E	E	E	E		E	T
Lone Tree Creek at Austin Road	SJC503	C	E	E	E	E	E		E		E	E	E	E	E	E		E	T
French Camp Slough at Airport Way	SJC504	C	E	E	E	E	E		E		E	E	E	E	E	E		E	T
VALLEY FLOOR DRAINAGE TO SAN JOAQUIN RIVER																			
MID Lateral 6/8 at Dunn Road	STC203	90	Exempt	E	E	E	E	E	E	E	E	E	E		E	E	E	E	T
MID Main Drain Inlet to Miller Lake	STC202	C	Exempt	E	E	E	E		E		E	E	E	E	E	E		E	T
MID Main Drain at Shoemake Road	STC211	C	Exempt	E	E	E	E		E		E	E	E	E	E	E		E	T
MID Lateral 3/4 at Paradise Road	STC204	83	Exempt	E	E	E			E	E	E	E		E	E	E		E	T
TID Lower Lateral 2 at Grayson Road	STC208	83	Exempt	E	E	E			E	E	E	E		E	E	E		E	T
TID Harding Drain at Carpenter Road	STC501	83	Exempt	E	E	E			E	E	E	E		E	E	E		E	T
TID Lateral 6/7 at Central Avenue	MER201	83	Exempt	E	E	E			E	E	E	E		E	E	E		E	T
TID Lateral 7 at Central Avenue	MER203	83	Exempt	E	E	E			E	E	E	E		E	E	E		E	T

P=Potential E = Existing Exempt = Exempt per State Water Resources Control Board Resolution No. 88-63, Section 2

Site Description	Site ID	Applicable Basin Plan Objective Surface Water Body Designation	MUN	AGRI-CULTURE		INDUSTRY			RECREATION			FRESHWATER HABITAT		MIGRATION		SPAWNING		WILD	Designated (D) or Tributary (T)
				AGR					REC-1		REC-2	WARM	COLD	MIGR		SPWN			
			Municipal and Domestic	Irrigation	Stock Watering	Process	Service Supply	Power	Contact	Canoeing and Rafting	Other Noncontact	Warm	Cold	Warm	Cold	War	Cold	Wildlife Habitat	
STANISLAUS WATERSHED																			
Stanislaus River at Camp Nine Road	CAL201	87	E	E	E			E	E	E	E	E	E					E	D
Stanislaus River at Parrott's Ferry	TUO201	87	E	E	E			E	E	E	E	E	E					E	D
Stanislaus River at Knight's Ferry	STC201	90	P	E	E	E	E	E	E	E	E	E	E		E	E	E	E	D
Stanislaus River at Caswell State Park	STC514	90	P	E	E	E	E	E	E	E	E	E	E		E	E	E	E	D
TUOLUMNE WATERSHED																			
Woods Creek at Mother lode Fairgrounds	TUO208	84	E	E	E			E	E	E	E	E	E					E	D
Woods Creek at Highway 108	TUO205	84	E	E	E			E	E	E	E	E	E					E	D
Woods Creek at Mill Villa Drive	TUO202	84	E	E	E			E	E	E	E	E	E					E	D
Sullivan Creek at Algerine Road	TUO207	84	E	E	E			E	E	E	E	E	E					E	D
Curtis Creek at Algerine Road	TUO209	84	E	E	E			E	E	E	E	E	E					E	D
Tuolumne River at Ward's Ferry	TUO203	84	E	E	E			E	E	E	E	E	E					E	D
Tuolumne River at Jacksonville Road	TUO204	85	P					E	E		E	E	E					E	D
Tuolumne River at Old La Grange	STC210	86	P	E	E				E	E	E	E	E		E	E	E	E	D
Tuolumne River at Mancini Park	STC205	86	P	E	E				E	E	E	E	E		E	E	E	E	D
Tuolumne River at Legion Park	STC216	86	P	E	E				E	E	E	E	E		E	E	E	E	D

P=Potential E = Existing Exempt = Exempt per State Water Resources Control Board Resolution No. 88-63, Section 2

Site Description	Site ID	Applicable Basin Plan Objective Surface Water Body Designation	MUN	AGRI-CULTURE		INDUSTRY			RECREATION			FRESHWATER HABITAT		MIGRATION		SPAWNING		WILD	Designated (D) or Tributary (T)
				AGR					REC-1		REC-2	WARM	COLD	MIGR		SPWN			
			Municipal and Domestic	Irrigation	Stock Watering	Process	Service Supply	Power	Contact	Canoeing and Rafting	Other Noncontact	Warm	Cold	Warm	Cold	War	Cold	Wildlife Habitat	
TUOLUMNE WATERSHED continued																			
Dry Creek at La Loma Road	STC206	86	P	E	E				E	E	E	E	E		E	E	E	E	T
Tuolumne River at 9th Street Bridge	STC207	86	P	E	E				E	E	E	E	E		E	E	E	E	D
Tuolumne River at 7th Street Bridge	STC214	86	P	E	E				E	E	E	E	E		E	E	E	E	D
Tuolumne River at Audie Peeples	STC215	86	P	E	E				E	E	E	E	E		E	E	E	E	D
Tuolumne River at Shiloh	STC513	86	P	E	E				E	E	E	E	E		E	E	E	E	D
MERCED WATERSHED																			
Merced River at Briceburg Recreation Area	MAR202	78	P	E				E	E	E	E	E	E					E	D
Merced River at Bagby Recreation Area	MAR203	78	P	E				E	E	E	E	E	E					E	D
Merced River at Highway 49	MAR201	78	P	E				E	E	E	E	E	E					E	D
Merced River at Merced Falls	MER209	81	E		E	E	E	E	E	E	E	E	E	E	E	E	E	E	D
Merced River at Highway 99	MER202	81	E		E	E	E	E	E	E	E	E	E	E	E	E	E	E	D
Merced River at River Road	MER546	81	E		E	E	E	E	E	E	E	E	E	E	E	E	E	E	D

P=Potential E = Existing Exempt = Exempt per State Water Resources Control Board Resolution No. 88-63, Section 2

Site Description	Site Code	Temperature Counts	Temp (ºC)	Field SC Counts	Field SC (umhos)			pH Counts	pH
			Goal		Basin Plan	Basin Plan (ref)	Goal		Basin Plan
			San Joaquin River at Vernalis		SJR at Airport Way , Vernalis; Old river at tracy Road Bridge	MUN	Irrig. Water Supply		In fresh water w/ designated COLD or WARM beneficial uses
			Bay-Delta Authority targets (Apr-Jun, Sep-Nov 20ºC)		Basin Plan (700 Apr-Aug) (1000 Sep-Mar)	California Secondary MCL (Short Term 2200 umhos/cm)	Water quality for Agriculture (Ayers and Westcot) (700umhos/cm)		Basin Plan (<6.5, >8.5)
FARMINGTON DRAINAGE AREA									
Littlejohn's Creek @ Sonora Road	STC212	25	8	25	0	0	0	25	0
Duck Creek @ Highway 4	SJC201	13	7	13	0	0	0	13	0
Littlejohn's Creek @ Austin Road	SJC213	15	2	15	0	0	0	15	2
Lone Tree Creek @ Austin Road	SJC503	23	6	23	0	0	0	23	2
French Camp Slough @ Airport Way	SJC504	26	6	26	0	0	0	26	2
Total Counts		**102**	**29**	**102**	**0**	**0**	**0**	**102**	**6**
VALLEY FLOOR DRAINAGE TO SAN JOAQUIN RIVER									
MID Lateral 6/8 @ Dunn Road	STC203	20	7	20	0	Exempt	1	20	3
MID Main Drain Inlet to Miller Lake	STC202	2	0	2	0	Exempt	0	2	0
MID Main Drain @ Shoemake Road	STC211	24	5	24	1	Exempt	4	24	0
MID Lateral 3/4 @ Paradise Road	STC204	18	7	18	0	Exempt	0	18	3
TID Lower Lateral 2 @ Grayson Road	STC208	21	6	21	0	Exempt	5	21	5
Harding Drain @ Carpenter Road	STC501	27	6	27	11	Exempt	16	27	0
TID Lateral 6/7 @ Central	MER201	7	0	7	3	Exempt	5	7	0
TID Lateral 7 @ Central	MER203	16	6	16	4	Exempt	7	16	0
Total Counts		**135**	**37**	**135**	**19**	**Exempt**	**38**	**135**	**11**
STANISLAUS WATERSHED									
Stanislaus River @ Camp Nine Road	CAL201	1	0	1	0	0	0	1	0
Stanislaus River @ Parrot's Ferry	TUO201	2	0	2	0	0	0	2	0
Stanislaus River @ Knight's Ferry	STC201	22	0	22	0	0	0	22	0
Stanislaus River @ Caswell Park	STC514	27	0	27	0	0	0	27	0
Total Counts		**52**	**0**	**52**	**0**	**0**	**0**	**52**	**0**
TUOLUMNE WATERSHED									
Woods Creek @ Motherlode Fairgrounds	TUO208	23	3	23	0	0	0	23	1
Woods Creek @ Highway 108	TUO205	2	0	2	0	0	0	2	0
Woods Creek @ Mill Villa Drive	TUO202	26	2	26	0	0	0	26	0
Sullivan Creek @ Algerine Road	TUO207	24	2	24	0	0	0	24	0
Curtis Creek @ Algerine Road	TUO209	10	2	10	0	0	0	10	2
Tuolumne River @ Ward's Ferry	TUO203	1	0	1	0	0	0	1	0
Tuolumne River @ Jacksonville/River Road	TUO204	2	0	2	0	0	0	2	0
Tuolumne River @ La Grange	STC210	22	0	22	0	0	0	22	0
Tuolumne River @ Mancini Park	STC205	7	0	7	0	0	0	7	0
Tuolumne River @ Legion Park	STC216	19	6	19	0	0	0	19	0
Dry Creek @ La Loma Road	STC206	26	3	26	0	0	0	26	0
Tuolumne River @ 9th Street	STC207	4	0	4	0	0	0	4	0
Tuolumne River @ 7th Street	STC214	3	0	3	0	0	0	3	0
Tuolumne River @ Audie Peeples	STC215	20	6	20	0	0	0	20	0
Tuolumne River @ Shiloh	STC513	27	6	27	0	0	0	27	0
Total Counts		**216**	**30**	**216**	**0**	**0**	**0**	**216**	**3**
MERCED WATERSHED									
Merced River @ Briceburg	MAR202	3	0	3	0	0	0	3	0
Merced River @ Bagby	MAR203	16	3	16	0	0	0	16	0
Merced River @ Highway 49	MAR201	2	0	2	0	0	0	2	0
Merced River @ Merced Falls	MER209	22	0	22	0	0	0	22	0
Merced River @ Highway 99	MER202	22	5	22	0	0	0	22	0
Merced River @ River Road	MER546	30	6	30	0	0	0	30	0
Total Counts		**95**	**14**	**95**	**0**	**0**	**0**	**95**	**0**
Total Program Count		**600**	**110**	**600**	**19**	**0**	**38**	**600**	**20**

Site Description	Site Code	Dissolved Oxygen Counts	Dissolved Oxygen (mg/L)	
			Basin Plan	Basin Plan
			All other[2] Delta waters excluding bodies of water constructed for special purposes and from which fish have been excluded or where the fishery is not important as a beneficial use	Cold/Spawning: Cosumnes, Mokelumne, Calaveras, Stanislaus from Goodwin Dam to SJR, Tuolumne from New Don Pedro Dam to SJR, Friant Dam to Mendota Pool, McSWAIN reservoir to SJR, Spawning3: Mendota dam to Vernalis, Mud Slough North, Salt Slough.
			Basin Plan (5.0mg/L)	Basin Plan (7.0mg/L)
FARMINGTON DRAINAGE AREA				
Littlejohn's Creek @ Sonora Road	STC212	25	0	0
Duck Creek @ Highway 4	SJC201	13	0	3
Littlejohn's Creek @ Austin Road	SJC213	15	1	2
Lone Tree Creek @ Austin Road	SJC503	23	0	5
French Camp Slough @ Airport Way	SJC504	26	0	4
Total Counts		**102**	**1**	**14**
VALLEY FLOOR DRAINAGE TO SAN JOAQUIN RIVER				
MID Lateral 6/8 @ Dunn Road	STC203	20	0	1
MID Main Drain Inlet to Miller Lake	STC202	2	0	0
MID Main Drain @ Shoemake Road	STC211	24	10	16
MID Lateral 3/4 @ Paradise Road	STC204	18	0	1
TID Lower Lateral 2 @ Grayson Road	STC208	20	2	2
Harding Drain @ Carpenter Road	STC501	27	0	0
TID Lateral 6/7 @ Central	MER201	7	0	0
TID Lateral 7 @ Central	MER203	16	0	0
Total Counts		**134**	**12**	**20**
STANISLAUS WATERSHED				
Stanislaus River @ Camp Nine Road	CAL201	1	0	0
Stanislaus River @ Parrot's Ferry	TUO201	2	0	0
Stanislaus River @ Knight's Ferry	STC201	22	0	0
Stanislaus River @ Caswell Park	STC514	27	0	0
Total Counts		**52**	**0**	**0**
TUOLUMNE WATERSHED				
Woods Creek @ Motherlode Fairgrounds	TUO208	23	0	0
Woods Creek @ Highway 108	TUO205	2	0	0
Woods Creek @ Mill Villa Drive	TUO202	26	0	0
Sullivan Creek @ Algerine Road	TUO207	24	0	0
Curtis Creek @ Algerine Road	TUO209	10	0	0
Tuolumne River @ Ward's Ferry	TUO203	1	0	0
Tuolumne River @ Jacksonville/River Road	TUO204	2	0	0
Tuolumne River @ La Grange	STC210	20	0	0
Tuolumne River @ Mancini Park	STC205	7	0	0
Tuolumne River @ Legion Park	STC216	19	0	0
Dry Creek @ La Loma Road	STC206	26	0	1
Tuolumne River @ 9th Street	STC207	4	0	0
Tuolumne River @ 7th Street	STC214	3	0	0
Tuolumne River @ Audie Peeples	STC215	19	0	0
Tuolumne River @ Shiloh	STC513	27	0	0
Total Counts		**213**	**0**	**1**
MERCED WATERSHED				
Merced River @ Briceburg	MAR202	3	0	0
Merced River @ Bagby	MAR203	16	0	1
Merced River @ Highway 49	MAR201	2	0	0
Merced River @ Merced Falls	MER209	22	0	0
Merced River @ Highway 99	MER202	22	0	1
Merced River @ River Road	MER546	30	0	0
Total Counts		**95**	**0**	**2**
Total Program Count		**596**	**13**	**37**

Site Description	Site Code	Turbidity Counts	Turbidity (NTU) Basin Plan Background groupings Basin Plan (0-5 NTU)	Turbidity (NTU) Basin Plan Background groupings Basin Plan (5-50 NTU)	Turbidity (NTU) Basin Plan Background groupings Basin Plan (50-100 NTU)	Turbidity (NTU) Basin Plan Background groupings Basin Plan (>100 NTU)	Turbidity (NTU) Basin Plan Delta waters: except for periods of storm runoff: Other Delta waters **Basin Plan (150 NTU)**	TOC Sample Counts	TOC (mg/L) Target Source water quality for the Delta Bay-Delta Authority (3.0mg/L)
FARMINGTON DRAINAGE AREA									
Littlejohn's Creek @ Sonora Road	STC212	24	22	2	0	0	0	8	4
Duck Creek @ Highway 4	SJC201	13	0	7	5	1	1	6	6
Littlejohn's Creek @ Austin Road	SJC213	14	0	11	3	0	0	3	3
Lone Tree Creek @ Austin Road	SJC503	22	0	13	9	0	0	7	7
French Camp Slough @ Airport Way	SJC504	25	1	11	11	2	1	7	7
Total Counts		**98**	**23**	**44**	**28**	**3**	**2**	**31**	**27**
VALLEY FLOOR DRAINAGE TO SAN JOAQUIN RIVER									
MID Lateral 6/8 @ Dunn Road	STC203	20	3	16	0	1	1	7	4
MID Main Drain Inlet to Miller Lake	STC202	2	0	1	1	0	0	0	0
MID Main Drain @ Shoemake Road	STC211	23	1	12	5	5	1	7	7
MID Lateral 3/4 @ Paradise Road	STC204	18	8	10	0	0	0	7	3
TID Lower Lateral 2 @ Grayson Road	STC208	21	11	10	0	0	0	7	2
Harding Drain @ Carpenter Road	STC501	25	7	14	2	2	2	8	7
TID Lateral 6/7 @ Central	MER201	7	5	2	0	0	0	2	2
TID Lateral 7 @ Central	MER203	14	9	5	0	0	0	4	4
Total Counts		**130**	**44**	**70**	**8**	**8**	**4**	**42**	**29**
STANISLAUS WATERSHED									
Stanislaus River @ Camp Nine Road	CAL201	1	1	0	0	0	0	0	0
Stanislaus River @ Parrot's Ferry	TUO201	2	2	0	0	0	0	0	0
Stanislaus River @ Knight's Ferry	STC201	22	22	0	0	0	0	7	0
Stanislaus River @ Caswell Park	STC514	27	11	16	0	0	0	7	0
Total Counts		**52**	**36**	**16**	**0**	**0**	**0**	**14**	**0**
TUOLUMNE WATERSHED									
Woods Creek @ Motherlode Fairgrounds	TUO208	22	14	6	1	1	0	8	2
Woods Creek @ Highway 108	TUO205	2	1	1	0	0	0	0	0
Woods Creek @ Mill Villa Drive	TUO202	25	11	13	0	1	1	8	2
Sullivan Creek @ Algerine Road	TUO207	23	10	12	0	1	1	8	3
Curtis Creek @ Algerine Road	TUO209	9	6	1	1	1	1	3	1
Tuolumne River @ Ward's Ferry	TUO203	1	1	0	0	0	0	0	0
Tuolumne River @ Jacksonville/River Road	TUO204	2	1	1	0	0	0	0	0
Tuolumne River @ La Grange	STC210	21	20	1	0	0	0	7	0
Tuolumne River @ Mancini Park	STC205	7	7	0	0	0	0	2	0
Tuolumne River @ Legion Park	STC216	18	12	6	0	0	0	4	0
Dry Creek @ La Loma Road	STC206	25	4	20	1	0	0	7	7
Tuolumne River @ 9th Street	STC207	4	3	1	0	0	0	1	0
Tuolumne River @ 7th Street	STC214	3	1	2	0	0	0	1	0
Tuolumne River @ Audie Peeples	STC215	19	5	14	0	0	0	4	1
Tuolumne River @ Shiloh	STC513	25	8	17	0	0	0	7	1
Total Counts		**206**	**104**	**95**	**3**	**4**	**3**	**60**	**17**
MERCED WATERSHED									
Merced River @ Briceburg	MAR202	3	3	0	0	0	0	2	0
Merced River @ Bagby	MAR203	15	12	3	0	0	0	6	1
Merced River @ Highway 49	MAR201	2	2	0	0	0	0	0	0
Merced River @ Merced Falls	MER209	21	21	0	0	0	0	8	1
Merced River @ Highway 99	MER202	22	12	9	0	1	1	7	0
Merced River @ River Road	MER546	25	7	17	1	0	0	7	2
Total Counts		**88**	**57**	**29**	**1**	**1**	**1**	**30**	**4**
Total Program Count		**574**	**264**	**254**	**40**	**16**	**10**	**177**	**77**

Site Description	Site Code	*E. coli* Sample Counts	*E. Coli* MPN Basin Plan (ref) Rec-1 Basin Plan (400)	*E. coli* MPN Goal Rec. Use USEPA Guideline Designated Beach (235 MPN)*	*E. coli* MPN Goal Rec. Use USEPA Guideline Moderate Contact (298 MPN)	*E. coli* MPN Goal Rec. Use USEPA Guideline Light Use (409 MPN)	*E. coli* MPN Goal Rec. Use USEPA Guideline Infrequent Use (575 MPN)	*E. coli* MPN Goal Rec. Use USEPA Guideline Above All Guidelines (>575 MPN)*
FARMINGTON DRAINAGE AREA								
Littlejohn's Creek @ Sonora Road	STC212	25	8	15	16	17	19	6
Duck Creek @ Highway 4	SJC201	13	2	10	10	11	11	2
Littlejohn's Creek @ Austin Road	SJC213	15	6	8	9	9	9	6
Lone Tree Creek @ Austin Road	SJC503	22	14	6	7	8	12	10
French Camp Slough @ Airport Way	SJC504	25	8	12	14	17	18	7
Total Counts		**100**	**38**	**51**	**56**	**62**	**69**	**31**
VALLEY FLOOR DRAINAGE TO SAN JOAQUIN RIVER								
MID Lateral 6/8 @ Dunn Road	STC203	20	2	17	18	18	18	2
MID Main Drain Inlet to Miller Lake	STC202	2	0	1	1	2	2	0
MID Main Drain @ Shoemake Road	STC211	24	18	4	5	6	6	18
MID Lateral 3/4 @ Paradise Road	STC204	18	4	12	13	14	14	4
TID Lower Lateral 2 @ Grayson Road	STC208	21	0	21	21	21	21	0
Harding Drain @ Carpenter Road	STC501	24	13	5	8	11	17	7
TID Lateral 6/7 @ Central	MER201	7	2	4	5	5	6	1
TID Lateral 7 @ Central	MER203	16	2	13	13	14	15	1
Total Counts		**132**	**41**	**77**	**84**	**91**	**99**	**33**
STANISLAUS WATERSHED								
Stanislaus River @ Camp Nine Road	CAL201	1	0	1	1	1	1	0
Stanislaus River @ Parrot's Ferry	TUO201	2	0	2	2	2	2	0
Stanislaus River @ Knight's Ferry	STC201	22	0	22	22	22	22	0
Stanislaus River @ Caswell Park	STC514	25	1	22	23	24	24	1
Total Counts		**50**	**1**	**47**	**48**	**49**	**49**	**1**
TUOLUMNE WATERSHED								
Woods Creek @ Motherlode Fairgrounds	TUO208	23	11	4	5	12	18	5
Woods Creek @ Highway 108	TUO205	2	0	2	2	2	2	0
Woods Creek @ Mill Villa Drive	TUO202	26	3	22	22	23	23	3
Sullivan Creek @ Algerine Road	TUO207	24	7	16	17	17	21	3
Curtis Creek @ Algerine Road	TUO209	10	6	3	3	4	6	4
Tuolumne River @ Ward's Ferry	TUO203	1	0	1	1	1	1	0
Tuolumne River @ Jacksonville/River Road	TUO204	2	0	2	2	2	2	0
Tuolumne River @ La Grange	STC210	23	0	23	23	23	23	0
Tuolumne River @ Mancini Park	STC205	7	0	7	7	7	7	0
Tuolumne River @ Legion Park	STC216	19	1	18	18	18	18	1
Dry Creek @ La Loma Road	STC206	26	9	14	17	17	18	8
Tuolumne River @ 9th Street	STC207	4	0	4	4	4	4	0
Tuolumne River @ 7th Street	STC214	3	1	2	2	2	2	1
Tuolumne River @ Audie Peeples	STC215	20	2	17	18	18	19	1
Tuolumne River @ Shiloh	STC513	25	3	21	21	22	24	1
Total Counts		**215**	**43**	**156**	**162**	**172**	**188**	**27**
MERCED WATERSHED								
Merced River @ Briceburg	MAR202	3	0	3	3	3	3	0
Merced River @ Bagby	MAR203	16	1	15	15	15	16	0
Merced River @ Highway 49	MAR201	2	0	2	2	2	2	0
Merced River @ Merced Falls	MER209	22	0	22	22	22	22	0
Merced River @ Highway 99	MER202	22	0	22	22	22	22	0
Merced River @ River Road	MER546	26	3	20	22	23	25	1
Total Counts		**91**	**4**	**84**	**86**	**87**	**90**	**1**
Total Program Count		**588**	**127**	**415**	**436**	**461**	**495**	**93**

Site Description	Site Code	Chloride Sample Counts	Chloride (mg/L)			Sulfate Sample Counts	Sulfate (mg/L)
			Basin Plan (ref)	Goal	Goal		Basin Plan (ref)
			Mun	Aquatic Life	Irrig. Water Supply		Mun
			Basin Plan (ref) (MUN) Cal Primary MCL (600 mg/L)	USEPA National Ambient W Q Criteria / 1-hour average (860 mg/L)	Water Quality for Agriculture (Ayers & Westcot) (106mg/L)		Basin Plan (ref) (MUN) Cal Secondary MCL (600mg/L)
FARMINGTON DRAINAGE AREA							
Littlejohn's Creek @ Sonora Road	STC212	4	0	0	0	4	0
Duck Creek @ Highway 4	SJC201	4	0	0	0	4	0
Littlejohn's Creek @ Austin Road	SJC213	4	0	0	0	4	0
Lone Tree Creek @ Austin Road	SJC503	5	0	0	0	5	0
French Camp Slough @ Airport Way	SJC504	5	0	0	0	5	0
Total Counts		**22**	**0**	**0**	**0**	**22**	**0**
VALLEY FLOOR DRAINAGE TO SAN JOAQUIN RIVER							
MID Lateral 6/8 @ Dunn Road	STC203	5	Exempt	0	0	5	Exempt
MID Main Drain Inlet to Miller Lake	STC202	0	Exempt	0	0	0	Exempt
MID Main Drain @ Shoemake Road	STC211	5	Exempt	0	0	5	Exempt
MID Lateral 3/4 @ Paradise Road	STC204	5	Exempt	0	0	5	Exempt
TID Lower Lateral 2 @ Grayson Road	STC208	5	Exempt	0	0	5	Exempt
Harding Drain @ Carpenter Road	STC501	5	Exempt	0	0	5	Exempt
TID Lateral 6/7 @ Central	MER201	1	Exempt	0	0	1	Exempt
TID Lateral 7 @ Central	MER203	3	Exempt	0	0	3	Exempt
Total Counts		**29**	**Exempt**	**0**	**0**	**29**	**Exempt**
STANISLAUS WATERSHED							
Stanislaus River @ Camp Nine Road	CAL201	0	0	0	0	0	0
Stanislaus River @ Parrot's Ferry	TUO201	0	0	0	0	0	0
Stanislaus River @ Knight's Ferry	STC201	3	0	0	0	4	0
Stanislaus River @ Caswell Park	STC514	5	0	0	0	5	0
Total Counts		**8**	**0**	**0**	**0**	**9**	**0**
TUOLUMNE WATERSHED							
Woods Creek @ Motherlode Fairgrounds	TUO208	4	0	0	0	4	0
Woods Creek @ Highway 108	TUO205	0	0	0	0	0	0
Woods Creek @ Mill Villa Drive	TUO202	4	0	0	0	4	0
Sullivan Creek @ Algerine Road	TUO207	4	0	0	0	4	0
Curtis Creek @ Algerine Road	TUO209	1	0	0	0	1	0
Tuolumne River @ Ward's Ferry	TUO203	0	0	0	0	0	0
Tuolumne River @ Jacksonville/River Road	TUO204	0	0	0	0	0	0
Tuolumne River @ La Grange	STC210	3	0	0	0	4	0
Tuolumne River @ Mancini Park	STC205	1	0	0	0	1	0
Tuolumne River @ Legion Park	STC216	3	0	0	0	3	0
Dry Creek @ La Loma Road	STC206	5	0	0	0	5	0
Tuolumne River @ 9th Street	STC207	1	0	0	0	1	0
Tuolumne River @ 7th Street	STC214	1	0	0	0	1	0
Tuolumne River @ Audie Peeples	STC215	3	0	0	0	3	0
Tuolumne River @ Shiloh	STC513	5	0	0	0	5	0
Total Counts		**35**	**0**	**0**	**0**	**36**	**0**
MERCED WATERSHED							
Merced River @ Briceburg	MAR202	1	0	0	0	1	0
Merced River @ Bagby	MAR203	2	0	0	0	1	0
Merced River @ Highway 49	MAR201	0	0	0	0	0	0
Merced River @ Merced Falls	MER209	4	0	0	0	4	0
Merced River @ Highway 99	MER202	5	0	0	0	5	0
Merced River @ River Road	MER546	4	0	0	0	4	0
Total Counts		**16**	**0**	**0**	**0**	**15**	**0**
Total Program Count		**110**	**0**	**0**	**0**	**111**	**0**

Site Description	Site Code	Total Arsenic Sample Count	Total Arsenic (ug/L)				Total Cadmium Sample Count	Total Cadmium (ug/L)			
			Basin Plan (ref)	Goal	Goal	Goal		Basin Plan (ref)	Goal	Goal	Goal
			MUN	Irrig. Water Supply	Drinking Water	Drinking Water		Mun	Aquatic Life	Irrig. Water Supply	Drinking Water
			Basin Plan (ref) (MUN) Cal Primary MCL (50ug/L)	Water Quality for Agriculture (Ayers & Westcot) (100ug/L)	USEPA Primary MCL (10ug/L)	Cal Public Health Goal (0.004ug/l)		Basin Plan (ref) (MUN) Cal Primary MCL (5ug/L)	California Toxics rule (USEPA) (calc)	Water Quality for Agriculture (Ayers & Westcot) (10ug/L)	Cal Public Health Goal (0.04ug/l)
FARMINGTON DRAINAGE AREA											
Littlejohn's Creek @ Sonora Road	STC212	5	0	0	0	2	5	0	0	0	0
Duck Creek @ Highway 4	SJC201	4	0	0	0	0	4	0	0	0	0
Littlejohn's Creek @ Austin Road	SJC213	4	0	0	0	0	4	0	0	0	0
Lone Tree Creek @ Austin Road	SJC503	5	0	0	0	0	5	0	0	0	0
French Camp Slough @ Airport Way	SJC504	5	0	0	0	0	5	0	0	0	0
Total Counts		**23**	**0**	**0**	**0**	**2**	**23**	**0**	**0**	**0**	**0**
VALLEY FLOOR DRAINAGE TO SAN JOAQUIN RIVER											
MID Lateral 6/8 @ Dunn Road	STC203	5	Exempt	0	0	0	5	Exempt	0	0	0
MID Main Drain Inlet to Miller Lake	STC202	0	Exempt	0	0	0	0	Exempt	0	0	0
MID Main Drain @ Shoemake Road	STC211	5	Exempt	0	0	0	5	Exempt	0	0	0
MID Lateral 3/4 @ Paradise Road	STC204	5	Exempt	0	0	0	5	Exempt	0	0	0
TID Lower Lateral 2 @ Grayson Road	STC208	5	Exempt	0	0	0	5	Exempt	0	0	0
Harding Drain @ Carpenter Road	STC501	6	Exempt	0	0	0	6	Exempt	0	0	0
TID Lateral 6/7 @ Central	MER201	2	Exempt	0	0	0	2	Exempt	0	0	0
TID Lateral 7 @ Central	MER203	3	Exempt	0	0	0	3	Exempt	0	0	0
Total Counts		**31**	**Exempt**	**0**	**0**	**0**	**31**	**Exempt**	**0**	**0**	**0**
STANISLAUS WATERSHED											
Stanislaus River @ Camp Nine Road	CAL201	0	0	0	0	0	0	0	0	0	0
Stanislaus River @ Parrot's Ferry	TUO201	0	0	0	0	0	0	0	0	0	0
Stanislaus River @ Knight's Ferry	STC201	5	0	0	0	0	5	0	0	0	0
Stanislaus River @ Caswell Park	STC514	5	0	0	0	0	5	0	0	0	0
Total Counts		**10**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**0**
TUOLUMNE WATERSHED											
Woods Creek @ Motherlode Fairgrounds	TUO208	5	0	0	0	0	5	0	0	0	0
Woods Creek @ Highway 108	TUO205	0	0	0	0	0	0	0	0	0	0
Woods Creek @ Mill Villa Drive	TUO202	5	0	0	0	0	5	0	0	0	5
Sullivan Creek @ Algerine Road	TUO207	5	0	0	0	0	5	0	0	0	0
Curtis Creek @ Algerine Road	TUO209	2	0	0	0	0	2	0	0	0	0
Tuolumne River @ Ward's Ferry	TUO203	0	0	0	0	0	0	0	0	0	0
Tuolumne River @ Jacksonville/River Road	TUO204	0	0	0	0	0	0	0	0	0	0
Tuolumne River @ La Grange	STC210	5	0	0	0	0	5	0	0	0	0
Tuolumne River @ Mancini Park	STC205	1	0	0	0	0	1	0	0	0	0
Tuolumne River @ Legion Park	STC216	3	0	0	0	0	3	0	0	0	0
Dry Creek @ La Loma Road	STC206	5	0	0	0	0	5	0	0	0	0
Tuolumne River @ 9th Street	STC207	1	0	0	0	0	1	0	0	0	0
Tuolumne River @ 7th Street	STC214	1	0	0	0	0	1	0	0	0	0
Tuolumne River @ Audie Peeples	STC215	3	0	0	0	0	3	0	0	0	0
Tuolumne River @ Shiloh	STC513	5	0	0	0	0	5	0	0	0	0
Total Counts		**41**	**0**	**0**	**0**	**0**	**41**	**0**	**0**	**0**	**5**
MERCED WATERSHED											
Merced River @ Briceburg	MAR202	1	0	0	0	0	1	0	0	0	0
Merced River @ Bagby	MAR203	4	0	0	0	0	4	0	0	0	0
Merced River @ Highway 49	MAR201	0	0	0	0	0	0	0	0	0	0
Merced River @ Merced Falls	MER209	5	0	0	0	0	5	0	0	0	0
Merced River @ Highway 99	MER202	5	0	0	0	0	5	0	0	0	0
Merced River @ River Road	MER546	5	0	0	0	0	5	0	0	0	0
Total Counts		**20**	**0**	**0**	**0**	**0**	**20**	**0**	**0**	**0**	**0**
Total Program Count		**125**	**0**	**0**	**0**	**2**	**125**	**0**	**0**	**0**	**5**

Site Description	Site Code	Total Chromium Sample Count	Total Chromium (ug/L)	Total Copper Sample Count	Total Copper (ug/L)			
			Basin Plan (ref)		Basin Plan (ref)	Goal	Goal	Goal
			Mun		Mun	Aquatic Life	Irrig. Water Supply	Drinking Water
			Basin Plan (ref) (MUN) Cal Primary MCL (50ug/L)		Basin Plan (ref) (MUN) Cal Primary MCL (1000ug/L)	California Toxics rule (USEPA) (calc)	Water Quality for Agriculture (Ayers & Westcot) (200ug/L)	California Toxics Rule (USEPA) for sources of drinking water (1300ug/L)
FARMINGTON DRAINAGE AREA								
Littlejohn's Creek @ Sonora Road	STC212	5	0	5	0	0	0	0
Duck Creek @ Highway 4	SJC201	4	0	4	0	0	0	0
Littlejohn's Creek @ Austin Road	SJC213	4	0	4	0	0	0	0
Lone Tree Creek @ Austin Road	SJC503	5	0	5	0	1	0	0
French Camp Slough @ Airport Way	SJC504	5	0	5	0	1	0	0
Total Counts		**23**	**0**	**23**	**0**	**2**	**0**	**0**
VALLEY FLOOR DRAINAGE TO SAN JOAQUIN RIVER								
MID Lateral 6/8 @ Dunn Road	STC203	5	Exempt	5	Exempt	0	0	0
MID Main Drain Inlet to Miller Lake	STC202	0	Exempt	0	Exempt	0	0	0
MID Main Drain @ Shoemake Road	STC211	5	Exempt	5	Exempt	1	0	0
MID Lateral 3/4 @ Paradise Road	STC204	5	Exempt	5	Exempt	0	0	0
TID Lower Lateral 2 @ Grayson Road	STC208	5	Exempt	5	Exempt	0	0	0
Harding Drain @ Carpenter Road	STC501	6	Exempt	6	Exempt	1	0	0
TID Lateral 6/7 @ Central	MER201	2	Exempt	2	Exempt	0	0	0
TID Lateral 7 @ Central	MER203	3	Exempt	3	Exempt	0	0	0
Total Counts		**31**	**Exempt**	**31**	**Exempt**	**2**	**0**	**0**
STANISLAUS WATERSHED								
Stanislaus River @ Camp Nine Road	CAL201	0	0		0	0	0	0
Stanislaus River @ Parrot's Ferry	TUO201	0	0	0	0	0	0	0
Stanislaus River @ Knight's Ferry	STC201	5	0	5	0	0	0	0
Stanislaus River @ Caswell Park	STC514	5	0	5	0	0	0	0
Total Counts		**10**	**0**	**10**	**0**	**0**	**0**	**0**
TUOLUMNE WATERSHED								
Woods Creek @ Motherlode Fairgrounds	TUO208	5	0	5	0	0	0	0
Woods Creek @ Highway 108	TUO205	0	0	0	0	0	0	0
Woods Creek @ Mill Villa Drive	TUO202	5	0	5	0	0	0	0
Sullivan Creek @ Algerine Road	TUO207	5	0	5	0	0	0	0
Curtis Creek @ Algerine Road	TUO209	2	0	2	0	0	0	0
Tuolumne River @ Ward's Ferry	TUO203	0	0		0	0	0	0
Tuolumne River @ Jacksonville/River Road	TUO204	0	0	0	0	0	0	0
Tuolumne River @ La Grange	STC210	5	0	5	0	0	0	0
Tuolumne River @ Mancini Park	STC205	1	0	1	0	0	0	0
Tuolumne River @ Legion Park	STC216	3	0	3	0	0	0	0
Dry Creek @ La Loma Road	STC206	5	0	5	0	0	0	0
Tuolumne River @ 9th Street	STC207	1	0	1	0	0	0	0
Tuolumne River @ 7th Street	STC214	1	0	1	0	0	0	0
Tuolumne River @ Audie Peeples	STC215	3	0	3	0	0	0	0
Tuolumne River @ Shiloh	STC513	5	0	5	0	0	0	0
Total Counts		**41**	**0**	**41**	**0**	**0**	**0**	**0**
MERCED WATERSHED								
Merced River @ Briceburg	MAR202	1	0	1	0	0	0	0
Merced River @ Bagby	MAR203	4	0	4	0	1	0	0
Merced River @ Highway 49	MAR201	0	0	0	0	0	0	0
Merced River @ Merced Falls	MER209	5	0	5	0	0	0	0
Merced River @ Highway 99	MER202	5	0	5	0	0	0	0
Merced River @ River Road	MER546	5	0	5	0	0	0	0
Total Counts		**20**	**0**	**20**	**0**	**1**	**0**	**0**
Total Program Count		**125**	**0**	**125**	**0**	**5**	**0**	**0**

Site Description	Site Code	Total Lead Sample Count	Total Lead (ug/L)				Total Nickel Sample Count	Total Nickel (ug/L)				
			Basin Plan (ref)	Goal	Goal	Goal		Basin Plan (ref)	Goal	Goal	Goal	Goal
			Mun	Drinking Water	Aquatic Life	Irrig. Water Supply		Mun	Drinking Water	Aquatic Life	Irrig. Water Supply	Drinking Water
			Basin Plan (ref) (MUN) Cal Primary MCL (15ug/L)	Cal Public Health Goal (2ug/L)	California Toxics rule (USEPA) (calc)	Water Quality for Agriculture (Ayers & Westcot) (5000ug/L)		Basin Plan (ref) (MUN) Cal Primary MCL (100ug/L)	Cal Public Health 12 ug/L)	California Toxics rule (USEPA) (calc)	Water Quality for Agriculture (Ayers & Westcot) (200ug/L)	California Toxics Rule (USEPA) for sources of drinking water (610 ug/L)
FARMINGTON DRAINAGE AREA												
Littlejohn's Creek @ Sonora Road	STC212	5	0	0	0	0	5	0	0	0	0	0
Duck Creek @ Highway 4	SJC201	4	0	0	0	0	4	0	0	0	0	0
Littlejohn's Creek @ Austin Road	SJC213	4	0	0	0	0	4	0	0	0	0	0
Lone Tree Creek @ Austin Road	SJC503	5	0	0	0	0	5	0	0	0	0	0
French Camp Slough @ Airport Way	SJC504	5	0	0	0	0	5	0	0	0	0	0
Total Counts		**23**	**0**	**0**	**0**	**0**	**23**	**0**	**0**	**0**	**0**	**0**
VALLEY FLOOR DRAINAGE TO SAN JOAQUIN RIVER												
MID Lateral 6/8 @ Dunn Road	STC203	5	Exempt	Exempt	0	0	5	Exempt	Exempt	0	0	0
MID Main Drain Inlet to Miller Lake	STC202	0	Exempt	Exempt	0	0	0	Exempt	Exempt	0	0	0
MID Main Drain @ Shoemake Road	STC211	5	Exempt	Exempt	0	0	5	Exempt	Exempt	0	0	0
MID Lateral 3/4 @ Paradise Road	STC204	5	Exempt	Exempt	0	0	5	Exempt	Exempt	0	0	0
TID Lower Lateral 2 @ Grayson Road	STC208	5	Exempt	Exempt	0	0	5	Exempt	Exempt	0	0	0
Harding Drain @ Carpenter Road	STC501	6	Exempt	Exempt	0	0	6	Exempt	Exempt	0	0	0
TID Lateral 6/7 @ Central	MER201	2	Exempt	Exempt	0	0	2	Exempt	Exempt	0	0	0
TID Lateral 7 @ Central	MER203	3	Exempt	Exempt	0	0	3	Exempt	Exempt	0	0	0
Total Counts		**31**	**Exempt**	**Exempt**	**0**	**0**	**31**	**Exempt**	**Exempt**	**0**	**0**	**0**
STANISLAUS WATERSHED												
Stanislaus River @ Camp Nine Road	CAL201	0	0	0	0	0	0	0	0	0	0	0
Stanislaus River @ Parrot's Ferry	TUO201	0	0	0	0	0	0	0	0	0	0	0
Stanislaus River @ Knight's Ferry	STC201	5	0	0	0	0	5	0	0	0	0	0
Stanislaus River @ Caswell Park	STC514	5	0	0	0	0	5	0	0	0	0	0
Total Counts		**10**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**0**
TUOLUMNE WATERSHED												
Woods Creek @ Motherlode Fairgrounds	TUO208	5	0	0	0	0	5	0	0	0	0	0
Woods Creek @ Highway 108	TUO205	0	0	0	0	0	0	0	0	0	0	0
Woods Creek @ Mill Villa Drive	TUO202	5	0	0	0	0	5	0	0	0	0	0
Sullivan Creek @ Algerine Road	TUO207	5	0	0	0	0	5	0	0	0	0	0
Curtis Creek @ Algerine Road	TUO209	2	0	0	0	0	2	0	0	0	0	0
Tuolumne River @ Ward's Ferry	TUO203	0	0	0	0	0	0	0	0	0	0	0
Tuolumne River @ Jacksonville/River Road	TUO204	0	0	0	0	0	0	0	0	0	0	0
Tuolumne River @ La Grange	STC210	5	0	0	0	0	5	0	0	0	0	0
Tuolumne River @ Mancini Park	STC205	1	0	0	0	0	1	0	0	0	0	0
Tuolumne River @ Legion Park	STC216	3	0	0	0	0	3	0	0	0	0	0
Dry Creek @ La Loma Road	STC206	5	0	0	0	0	5	0	0	0	0	0
Tuolumne River @ 9th Street	STC207	1	0	0	0	0	1	0	0	0	0	0
Tuolumne River @ 7th Street	STC214	1	0	0	0	0	1	0	0	0	0	0
Tuolumne River @ Audie Peeples	STC215	3	0	0	0	0	3	0	0	0	0	0
Tuolumne River @ Shiloh	STC513	5	0	0	0	0	5	0	0	0	0	0
Total Counts		**41**	**0**	**0**	**0**	**0**	**41**	**0**	**0**	**0**	**0**	**0**
MERCED WATERSHED												
Merced River @ Briceburg	MAR202	1	0	0	0	0	1	0	0	0	0	0
Merced River @ Bagby	MAR203	4	0	0	0	0	4	0	0	0	0	0
Merced River @ Highway 49	MAR201	0	0	0	0	0	0	0	0	0	0	0
Merced River @ Merced Falls	MER209	5	0	0	0	0	5	0	0	0	0	0
Merced River @ Highway 99	MER202	5	0	0	0	0	5	0	0	0	0	0
Merced River @ River Road	MER546	5	0	0	0	0	5	0	0	0	0	0
Total Counts		**20**	**0**	**0**	**0**	**0**	**20**	**0**	**0**	**0**	**0**	**0**
Total Program Count		**125**	**0**	**0**	**0**	**0**	**125**	**0**	**0**	**0**	**0**	**0**

Site Description	Site Code	Total Zinc Sample Count	Total Zinc (ug/L)				Total Mercury Sample Count	Total Mercury (ug/L)		
			Basin Plan (ref)	Goal	Goal	Goal		Basin Plan (ref)	Goal	Goal
			Mun	Aquatic Life	Irrig. Water Supply	Rec. Use		Mun	Aquatic Life	Drinking Water
			Basin Plan (ref) (MUN) Cal Primary MCL (5000ug/L)	California Toxics rule (USEPA) (calc)	Water Quality for Agriculture (Ayers & Westcot) (2000ug/L)	USEPA IRIS Reference Dose (2100ug/L)		Basin Plan (ref) (MUN) Cal Primary MCL (2ug/L)	USEPA National Ambient W Q Criteria/1 hour average (1.4ug/L)	California Toxics Rule (USEPA) for sources of drinking water (0.05ug/L)
FARMINGTON DRAINAGE AREA										
Littlejohn's Creek @ Sonora Road	STC212	5	0	0	0	0	5	0	0	0
Duck Creek @ Highway 4	SJC201	4	0	0	0	0	4	0	0	0
Littlejohn's Creek @ Austin Road	SJC213	4	0	0	0	0	4	0	0	0
Lone Tree Creek @ Austin Road	SJC503	5	0	0	0	0	5	0	0	0
French Camp Slough @ Airport Way	SJC504	5	0	0	0	0	5	0	0	0
Total Counts		**23**	**0**	**0**	**0**	**0**	**23**	**0**	**0**	**0**
VALLEY FLOOR DRAINAGE TO SAN JOAQUIN RIVER										
MID Lateral 6/8 @ Dunn Road	STC203	5	Exempt	0	0	0	5	Exempt	0	0
MID Main Drain Inlet to Miller Lake	STC202	0	Exempt	0	0	0	0	Exempt	0	0
MID Main Drain @ Shoemake Road	STC211	5	Exempt	1	0	0	5	Exempt	0	0
MID Lateral 3/4 @ Paradise Road	STC204	5	Exempt	0	0	0	5	Exempt	0	0
TID Lower Lateral 2 @ Grayson Road	STC208	5	Exempt	0	0	0	5	Exempt	0	0
Harding Drain @ Carpenter Road	STC501	6	Exempt	0	0	0	6	Exempt	0	0
TID Lateral 6/7 @ Central	MER201	2	Exempt	0	0	0	2	Exempt	0	0
TID Lateral 7 @ Central	MER203	3	Exempt	0	0	0	3	Exempt	0	0
Total Counts		**31**	**Exempt**	**1**	**0**	**0**	**31**	**Exempt**	**0**	**0**
STANISLAUS WATERSHED										
Stanislaus River @ Camp Nine Road	CAL201	0	0	0	0	0	0	0	0	0
Stanislaus River @ Parrot's Ferry	TUO201	0	0	0	0	0	0	0	0	0
Stanislaus River @ Knight's Ferry	STC201	5	0	0	0	0	5	0	0	0
Stanislaus River @ Caswell Park	STC514	5	0	0	0	0	5	0	0	0
Total Counts		**10**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**
TUOLUMNE WATERSHED										
Woods Creek @ Motherlode Fairgrounds	TUO208	5	0	0	0	0	5	0	0	0
Woods Creek @ Highway 108	TUO205	0	0	0	0	0	0	0	0	0
Woods Creek @ Mill Villa Drive	TUO202	5	0	0	0	0	5	0	0	0
Sullivan Creek @ Algerine Road	TUO207	5	0	0	0	0	5	0	0	0
Curtis Creek @ Algerine Road	TUO209	2	0	0	0	0	2	0	0	0
Tuolumne River @ Ward's Ferry	TUO203	0	0	0	0		0	0	0	0
Tuolumne River @ Jacksonville/River Road	TUO204	0	0	0	0	0	0	0	0	0
Tuolumne River @ La Grange	STC210	5	0	0	0	0	5	0	0	0
Tuolumne River @ Mancini Park	STC205	1	0	0	0	0	1	0	0	0
Tuolumne River @ Legion Park	STC216	3	0	0	0	0	3	0	0	0
Dry Creek @ La Loma Road	STC206	5	0	0	0	0	5	0	0	0
Tuolumne River @ 9th Street	STC207	1	0	0	0	0	1	0	0	0
Tuolumne River @ 7th Street	STC214	1	0	0	0	0	1	0	0	0
Tuolumne River @ Audie Peeples	STC215	3	0	0	0	0	3	0	0	0
Tuolumne River @ Shiloh	STC513	5	0	0	0	0	5	0	0	0
Total Counts		**41**	**0**	**0**	**0**	**0**	**41**	**0**	**0**	**0**
MERCED WATERSHED										
Merced River @ Briceburg	MAR202	1	0	0	0	0	1	0	0	0
Merced River @ Bagby	MAR203	4	0	0	0	0	4	0	0	0
Merced River @ Highway 49	MAR201	0	0	0	0	0	0	0	0	0
Merced River @ Merced Falls	MER209	5	0	0	0	0	5	0	0	0
Merced River @ Highway 99	MER202	5	0	0	0	0	5	0	0	0
Merced River @ River Road	MER546	5	0	0	0	0	5	0	0	0
Total Counts		**20**	**0**	**0**	**0**	**0**	**20**	**0**	**0**	**0**
Total Program Count		**125**	**0**	**1**	**0**	**0**	**125**	**0**	**0**	**0**

APPENDIX C5: Monthly Comparison of Results to Water Quality Objectives, Targets, and Guidelines: Farmington Drainage Area

Code	2003																							2004								
	Jan			Feb		Mar			Apr		May		Jun			Jul		Aug		Sep		Oct		Nov		Jan			Feb			Mar		
Drinking Water																																	
STC212					B	B	B, T		B	B	B, T	B, A	B, T	B	B, T, A	B		B	B		B	B	B	B		B	B	B	B	B		B	B	
SJC201		B					B				B, T	B, T	B, T	B, T	B, T	B		B	B		B	B				B							
SJC213						D	B		D	D	D	B	B, T	B, T	B, T	B		B	B		D	B	S	S		S	S	B	B		B	B		B	B	
SJC503		B		B	B	B	B		B, T	B, T	B, T	B, T	B, T	B, T	B, T	B		B	B		B	B	B	B				B					B		B
SJC504		B		B	B	B	B		B, T	B, T	B, T	B, T	B, T	B, T	B, T	B		B	B		B	B	B	B		B	B	B					B		B
Aquatic Life																																	
STC212					T1	T1	T1		T1	T1	T, T1	T, T1	T, T1	T, T1	T, T1	T1		T1	T1		T, T1	T, T1	T, T1	T1		T1	T1	T1	T1		T2	T2			T1	
SJC201		T3					T3				T, T4	T, T2	T, DO, T2	T, DO, T2, C	T, T2	DO, T3		T3	T2		T, T2	T, T2				T3								
SJC213						D	T2		D	D	D	T, T2	T2	T2	DO, T2	T2		T3	DO, T3		D	T, T2	S	S		S	S	T2	T2		P, T2	T3		P	T2	
SJC503		DO, T3	DO, T3	DO, T2	P, T2	T2	P, T2, C		T2	T2	T2	T, T3	T, DO, T3	T, T2	T, T2	T2		T3	DO, T3		T2	T, T2	T3	T, T2				T3						T3
SJC504		T2	T2	T2	P, T2	T3	T2		T3	T3	T3	T, T2	T, DO, T4	T, T3	T, DO, T3	DO, T3		T3	DO, T3		T3	T, T2	T3	T, T2		T2	T1	T2		P, T2				T3
Recreation																																	
STC212							B					B	B									B				B	B				B	B	
SJC201							B				B														B								
SJC213						D	B		D	D	D	B	B		B				B		D		S	S		S	S	B					B		
SJC503				B	B	B			B	B	B	B	B	B	B	B							B	B				B						B
SJC504						B	B		B		B	B	B		B	B		B					B			B		B						B
Irrigation																																	
STC212																																	
SJC201																																	
SJC213						D			D	D	D										D		S	S		S	S							
SJC503																																	
SJC504																																	

Drinking Water								D	Dry
T	TOC >3.0 mg/l	A	Arsenic >0.004 ug/l	Cd	Cadmium >0.04 ug/l	B	E. coli present	NA	Beneficial Use Not Applicable
Aquatic Life								S	Stagnant
P	pH <6.5, >8.5	T	Temperature > 20-C	DO	DO <7.0 mg/l	Z	Zinc >calc ug/l	C	Copper >calc ug/l	E	Exempt per State Board Resolution 88-63
T1	Turbidity 0-5 NTU	T2	Turbidity 5-50 NTU	T3	Turbidity 50-100NTU	T4	Turbidity >100 NTU				No Sample Collected
Irrigation		I	SC >700 umhos/cm	**Recreation**		R	>235 MPN/100ml				All samples were within Water Quality Objectives

APPENDIX C5: Monthly Comparison of Results to Water Quality Objectives, Targets, and Guidelines: Valley Floor Drainage Area

Code	2003																								2004								
	Jan			Feb		Mar			Apr		May		Jun			Jul		Aug			Sep		Oct		Nov		Jan			Feb			Mar		
Drinking Water																																		
STC203		E		E	E		E			T		T	T		T	E		E	E		E	E	E	E	E	E								
STC202		E		E																														
STC211					E	E	E		T	T	T	T	T	T	T	E		E	E		E	E	E	E	E	E			D	E		E	E	
STC204		E		S	D	D	E				T	T	T			E		E	E		E	E	E	E	E	E	S								
STC208		E		E	E	D	E				T		T			E		E	E		E	E	E	E	E	E	E								
STC501	E	E	E	E	E	E	T		E	T	T	T	T	T	T	E	E	E	E	E	E	E	E	E	E	E	E								
MER201		E		E	E	E	T		E	T																								
MER203												T	T	T	T		E	E	E	E	E	E	E	E	E	E	E	E							
Aquatic Life																																		
STC203		P, T2		P, T1	T2		T2		T2	T2	T2	T, T2	T, T2	T, T2	T, T2	T1		T2	T2		T, T2	T, T4	T, T2	P, DO, T2	T1	T2								
STC202		T3		T2																														
STC211					T2	T2	T1		DO, T2	DO, T4	DO, T2	T, DO, T4, C, Z	T, DO, T2	T, DO, T4	T, DO, T2	DO, T3		T3	DO, T2		DO, T2	T, DO, T2	DO, T2	DO, T2	DO, T3	T2	DO, T3	DO, T3		D	T4			T3	
STC204		T1		S	D	D	T1		T2	T2	T1	T, T2	T, T2	T, T2	T, P, T2	T2		T2	T1		T, T2	T, T1	T, P, T1	P, DO, T1	T1	T2	S								
STC208		P, T2		T1	DO, T1	D	P, T2		P, T2	DO, T2	P, T1	T, T2	T, T2	T, T2	T, T2	T1		T1	T2		T1	T, T1	T, T1	T1	T2	T1	P, T1								
STC501	T2	T2	T2	T1	T1	T1	T2	T4	T2	T2	T2	T, T2	T, T2	T, T1	T, T2	T3	T2	T4	T3	T2	T, T1	T, T2	T1	T2	T1									
MER201		T1		T1	T1	T1	T1		T2	T2																								
MER203												T, T2	T, T1	T, T2	T, T2		T2	T1	T1	T1	T, T1	T, T1	T1	T2	T1			T1							
Recreation																																		
STC203					R							R											R												
STC202		R																																
STC211					R	R			R	R	R	R	R	R	R	R		R	R		R	R		R	R		R			D	R			R	
STC204				S	D	D						R	R	R	R				R		R						S								
STC208						D																													
STC501	R	R		R	R	R			R		R		R	R	R		R	R	R	R	R	R		R	R		R								
MER201				R					R	R																								
MER203													R					R	R																
Irrigation																																		
STC203																																		
STC202																																		
STC211												I																	D						
STC204				S	D	D																					S								
STC208						D																												
STC501	I	I	I	I							I		I				I			I					I		I								
MER201		I		I		I																			I									
MER203																		I	I						I			I						

Drinking Water							D	Dry
T	TOC >3.0 mg/l	A	Arsenic >0.004 ug/l	Cd	Cadmium >0.04 ug/l	B	E. coli present	NA	Beneficial Use Not Applicable
Aquatic Life								S	Stagnant
P	pH <6.5, >8.5	T	Temperature > 20-C	DO	DO <7.0 mg/l	Z	Zinc >calc ug/l	C	Copper >calc ug/l	E	Exempt per State Board Resolution 88-63
T1	Turbidity 0-5 NTU	T2	Turbidity 5-50 NTU	T3	Turbidity 50-100NTU	T4	Turbidity >100 NTU				No Sample Collected
Irrigation		I	SC >700 umhos/cm	**Recreation**		R	>235 MPN/100ml				All samples were within Water Quality Objectives

APPENDIX D5: Monthly Comparison of Results to Water Quality Objectives, Targets, and Guidelines: Stanislaus Watershed

Code	2003												2004		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Jan	Feb	Mar
Drinking Water															
CAL201		B													
TUO201															
STC201	B	B	B B	B	B	B B	B	B	B B	B B	B B		B		
STC514	B	B	B B	B	B	B B	B	B	B B	B B	B B		B	B	B
Aquatic Life															
CAL201		T1													
TUO201	T1	T1													
STC201	T1	T1	T1 T1	T1	T1	T1 T1	T1	T1	T1 T1	T1 T1	T1 T1	T1			
STC514	T1 T2	T1	T1 T1 T2	T2	T1	T2 T2	T1	T2	T2 T2	T2 T2	T1 T1	T2	T2	T1	T2
Recreation															
CAL201															
TUO201															
STC201															
STC514										R R		R			
Irrigation Supply															
CAL201															
TUO201															
STC201															
STC514															

Drinking Water									D	Dry
T	TOC >3.0 mg/l	A	Arsenic >0.004 ug/l	Cd	Cadmium >0.04 ug/l	B	E. coli present		NA	Beneficial Use Not Applicable
Aquatic Life									S	Stagnant
P	pH <6.5, >8.5	T	Temperature > 20-C	DO	DO <7.0 mg/l	Z	Zinc >calc ug/l	C Copper >calc ug/l	E	Exempt per State Board Resolution 88-63
T1	Turbidity 0-5 NTU	T2	Turbidity 5-50 NTU	T3	Turbidity 50-100NTU	T4	Turbidity >100 NTU			No Sample Collected
Irrigation		I	SC >700 umhos/cm	**Recreation**		R	>235 MPN/100ml			All samples were within Water Quality Objectives

APPENDIX C5: Monthly Comparison of Results to Water Quality Objectives, Targets, and Guidelines: Tuolumne Watershed

Code	2003																											2004								
	Jan			Feb		Mar			Apr		May		Jun			Jul		Aug			Sep		Oct			Nov		Jan			Feb			Mar		
Drinking Water																																				
TUO208							B		B	B, T	B	B	B, T	B	B	B		B	B		B	B	B	B		B	B	B	B		B	B		B	B	
TUO205					B	B																														
TUO202		B		B	B	B	B, Cd		B	B, T, Cd	B	B, Cd	B, T	B, Cd	B, Cd	B		B	B		B	B	B	B		B	B	B			B	B		B	B	
TUO207					B	B	B		B	B, T	B, T	B	B, T	B	B	B		B	B			B	B	B		B	B	B	B		B	B		B	B	
TUO209												B	B, T	B	D	D		D	D			D	D	D		D	B	B	B		B	B		B	B	
TUO203		B																																		
TUO204		B		B																																
STC210		B		B	B	B	B		B	B	B	B	B	B	B	B		B	B		B	B	B	B		B	B	B								
STC205		B		B	B	B	B		B		B																									
STC216												B	B	B	B	B		B	B		B	B	B	B		B	B	B	B		B	B		B	B	
STC206		B		B	B	B	B		B, T	B, T	B, T	B, T	B, T	B, T	B, T	B		B	B		B	B	B	B		B	B	B			B	B		B	B	
STC207		B		B	B					B																										
STC214						B	B		B																											
STC215											B	B	B, T	B	B	B		B	B		B	B	B	B		B	B	B	B		B	B		B	B	
STC513		B		B	B	B	B		B	B	B	B	B, T	B	B	B		B	B		B	B	B	B		B	B	B		B			B			B
Aquatic Life																																				
TUO208							T1		T2	T2	T2	T1	T, T2	T	T, T2	T1		T1	T1		T1	T1	T1	T1		T1	T1	T1	T3		T2	T4			P, T1	
TUO205					T2	T1																														
TUO202		T2		T1	T2	T1	T1		T1	T2	T2	T1	T, T2	T, T2	T2	T2		T2	T2		T1	T1	T2	T1		T1	T1	T2			T2	T4			T1	
TUO207					T2	T1	T2		T2	T2	T2	T1	T, T2	T, T2	T2	T1		T2	T2			T1	T1	T1		T1	T1	T2	T1		T2	T4			T1	
TUO209												T1	T, T1	T, T3	D	D		D	D			D	D	D		D	T1	T1	P, T1		T2	T4			P, T1	
TUO203		T1																																		
TUO204		T1		T2																																
STC210		T1		T1	T1	T1	T1		T1	T1	T1	T1	T1	T1	T1	T1		T2	T1		T1	T1	T1			T1	T1	T1								
STC205		T1		T1	T1	T1	T1		T1		T1																									
STC216												T, T2	T, T1	T, T2	T, T2	T1		T1	T2		T, T2	T, T1	T1	T1		T1	T1	T1	T1		T2	T1			T1	
STC206		T2		T1	T1	T1	T2		T2	T2	T2	T2	T, T2	T, T2	T, T2	T2		T2	DO, T2		T2	T2	T2	T2		T2	T2	T3			T2	T2			T1	
STC207		T1		T1	T1					T2																										
STC214						T1	T2		T2																											
STC215											T2	T, T1	T, T2	T, T2	T, T2	T2		T2	T2		T, T2	T, T2	T1	T1		T1	T1	T2	T2		T2	T2			T2	
STC513		T2	T2	T1	T2	T1	T2	T2	T2	T2	T2	T, T2	T, T2	T, T2	T, T2	T1		T1	T1		T, T2	T, T1	T2	T1		T2	T1	T2		T2						

Drinking Water									
T	TOC >3.0 mg/l	A	Arsenic >0.004 ug/l	Cd	Cadmium >0.04 ug/l	B	E. coli present		
Aquatic Life									
P	pH <6.5, >8.5	T	Temperature > 20-C	DO	DO <7.0 mg/l	Z	Zinc >calc ug/l	C	Copper >calc ug/l
T1	Turbidity 0-5 NTU	T2	Turbidity 5-50 NTU	T3	Turbidity 50-100NTU	T4	Turbidity >100 NTU		
Irrigation		I	SC >700 umhos/cm	**Recreation**		R	>235 MPN/100ml		

D	Dry
NA	Beneficial Use Not Applicable
S	Stagnant
E	Exempt per State Board Resolution 88-63
(shaded)	No Sample Collected
(blank)	All samples were within Water Quality Objectives

APPENDIX C5: Monthly Comparison of Results to Water Quality Objectives, Targets, and Guidelines: Tuolumne Watershed, cont.

Code	2003 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	2004 Jan	Feb	Mar
Recreation														
TUO208					R	R R R R	R	R R	R	R R	R R	R R	R R	R
TUO205														
TUO202					R	R		R					R	
TUO207				R		R R				R	R R		R R	
TUO209					R	R R D	D	D D	D	D D	D R	R	R R	
TUO203														
TUO204														
STC210														
STC205														
STC216								R						
STC206		R	R			R		R R	R	R	R	R	R R	R
STC207														
STC214			R											
STC215								R					R	R
STC513			R	R		R							R	
Irrigation Supply														
TUO208														
TUO205														
TUO202														
TUO207														
TUO209						D D	D	D D	D	D D	D			
TUO203														
TUO204														
STC210														
STC205														
STC216														
STC206														
STC207														
STC214														
STC215														
STC513														

Drinking Water							D	Dry
T TOC >3.0 mg/l	A Arsenic >0.004 ug/l	Cd Cadmium >0.04 ug/l	B E. coli present				NA	Beneficial Use Not Applicable
Aquatic Life							S	Stagnant
P pH <6.5, >8.5	T Temperature > 20-C	DO DO <7.0 mg/l	Z Zinc >calc ug/l	C Copper >calc ug/l			E	Exempt per State Board Resolution 88-63
T1 Turbidity 0-5 NTU	T2 Turbidity 5-50 NTU	T3 Turbidity 50-100NTU	T4 Turbidity >100 NTU					No Sample Collected
Irrigation	I SC >700 umhos/cm	**Recreation**	R >235 MPN/100ml					All samples were within Water Quality Objectives

APPENDIX C5: Monthly Comparison of Results to Water Quality Objectives, Targets, and Guidelines: Merced Watershed

Code	2003												2004		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		Jan	Feb	Mar
Drinking Water															
MAR202			B B	B											
MAR203				B	B B	B, T B B	B	B B	B B	B B	B B		B		
MAR201		B													
MER209	B	B B	B B	B	B B	B B B	B	B B	B B	B B	B B		B		
MER202	B	B B	B B	B	B B	B B B	B	B B	B B	B B	B B		B		
MER546	B	B B	B B	B	B, T B B	B, T B B	B	B B B	B B	B B	B B		B	B	B B B
Aquatic Life															
MAR202			T1 T1	T1											
MAR203				T2	T1	T2, C T2	T, DO, T1 T, T1	T1	T1	T, T1 T1	T1 T1		T1	T1	
MAR201	T1	T1													
MER209	T1	T1	T1 T1	T1	T1	T1	T1	T1	T1	T1 T1	T1 T1		T1	T1	
MER202	T2	T1 T2	T1 T1	T1	T2	T1	T, T1 T, T1 T, T1	T2	T1	T1	T, DO, T2 T, T2		T2	T2	
MER546	T2	T2 T2	T1 T2 T2	T2	T2	T, T2 T, T2 T, T2	T3	T2 T2	T1	T1	T, T1 T, T1		T1	T2	T1
Recreation															
MAR202															
MAR203						R									
MAR201															
MER209															
MER202															
MER546						R R		R R R		R					
Irrigation Supply															
MAR202															
MAR203															
MAR201															
MER209															
MER202															
MER546															

Drinking Water									D	Dry
T	TOC >3.0 mg/l	A	Arsenic >0.004 ug/l	Cd	Cadmium >0.04 ug/l	B	E. coli present		NA	Beneficial Use Not Applicable
Aquatic Life									S	Stagnant
P	pH <6.5, >8.5	T	Temperature > 20-C	DO	DO <7.0 mg/l	Z	Zinc >calc ug/l	C Copper >calc ug/l	E	Exempt per State Board Resolution 88-63
T1	Turbidity 0-5 NTU	T2	Turbidity 5-50 NTU	T3	Turbidity 50-100NTU	T4	Turbidity >100 NTU			No Sample Collected
Irrigation		I	SC >700 umhos/cm	**Recreation**		R	>235 MPN/100ml			All samples were within Water Quality Objectives

Appendix D:
Multi-Agency Monitoring Table

San Joaquin River Basin Rotational Sub-basin Monitoring: Eastside Basin, January 2003 – April 2004
(Stanislaus, Tuolumne, and Merced River Watersheds and Farmington and Valley Floor Drainage Areas

Site Location / Agency	Project/ funding	SITE CODE CVRWQCB	SITE CODE USGS	Latitude	Longitude	Flow	Water Column Analyses EC	pH	Temp	DO	Turb	B	Minerals	TE Total	Pesticides Scans OP	OC	TSS	TOC	Bacti	Sediment TE/Min	OC-Scan	Toxicity	Tox-test 96/ 48-hr Acute	Bio Assy
Farmington Drainage Basin																								
Littlejohns Creek @ Sonora Rd		**STC 212**		**37 50' 45"**	**120 42' 50"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					
Duck Creek @ Hwy 4		**SJC 201**		**37 56' 58"**	**121 10' 55"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM				Q	
Lone Tree Creek @ Austin Rd		**SJC 503**		**37 51' 25"**	**121 10' 45"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					
CVRWQCB	SWAMP						M	M	M	M	M						M		M					
French Camp Slough @ Airport Way		**SJC 504**		**37 53' 55"**	**121 16' 25"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					
CVRWQCB	SWAMP						M	M	M	M	M						M		M					
Littlejohns Creek @ Austin Rd		**STC 213**		**37 51' 15"**	**121 10' 60"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM				Q	
Eastside Drainage to San Joaquin River																								
MID Main Drain @ Shoemake Ave		**STC 211**		**37 39' 60"**	**121 9' 35"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					
MID Lateral 6/8 @ Dunn Rd		**STC 203**		**37 42' 30"**	**121 9' 10"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM				Q	
MID							M	M				M	M											
MID Lateral 4 @ Paradise Rd		**STC 204**		**37 37' 60"**	**121 9' 50"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM				Q	
MID							M	M				M	M											
Harding Drain @ Carpenter Rd		**STC 501**	**112 745 60**	**37 27' 50"**	**121 1' 50"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM				Q	
CVRWQCB	SWAMP						M	M	M	M	M						M		M					
USGS	NAWQA					MX	MX	MX	MX	MX						MX	MX			A	A	A		
TID Lateral 6/7 @ Central		**MER 201**		**37 23' 40"**	**120 57' 40"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					

W = Weekly

BM= Bimonthly 2x/month

M = Monthly

Q = Quarterly (October, January, April, July)

A = Annual

1=Gauged Site

2= Gauge/telemetered site

X=Storm sampling (2 storms, every 6 hours = 5 samples each storm per site)

B = Biannual 2x/year

Minerals =B, Cl, H_2SO_4, Ca, Mg, Total Hardness

Minerals =MID tests for: ??

TE=Trace Elements: Cu, Cr, Pb, Ni, Zn, Hg, As,Cd

B$= Proposed biannual 2x/year OP synoptic sampling

G= Monthly (Aug - Dec) Weekly (Jan - July)

SWAMP Ongoing Chilcott, J.

SWAMP Intensive Basin Jan 2003 - Apr 2004 Graham, C.

MID: Modesto Irrigation District

USGS NAWQA: U.S. Geological Survey, National Water-Quality Assessment Program. 1992 to present

FB = Funding based fecal coliform

San Joaquin River Basin Rotational Sub-basin Monitoring: Eastside Basin, January 2003 – April 2004
(Stanislaus, Tuolumne, and Merced River Watersheds and Farmington and Valley Floor Drainage Areas

Site Location	Project/	SITE CODE		Latitude	Longitude	Flow	Water Column Analyses								Pesticides Scans					Sediment			Tox-test 96/ 48-hr	
Agency	funding	CVRWQCB	USGS				EC	pH	Temp	DO	Turb	B	Minerals	TE Total	OP	OC	TSS	TOC	Bacti	TE/Min	OC-Scan	Toxicity	Acute	Bio Assy
Lower Lateral 2 @ Grayson		**STC 208**		**37 33' 57"**	**121 8' 25"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM				Q	
Stanislaus River Watershed																								
Stanislaus River @ Knight's Ferry		**STC 201**		**37 49' 20"**	**120 39' 35"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM				Q	
Stanislaus River @ Caswell State Park		**STC 514**	**374 209 121 103**	**37 42' 10"**	**121 10' 40"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					
USGS	NAWQA																							A
Tuolumne River Watershed																								
Woods Creek @ Mill Villa Dr		**TUO 202**		**37 57' 45"**	**120 23' 55"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM				Q	
Woods Creek @ Mother Lode Fairgrounds		**TUO 208**		**37 58' 40"**	**120 23' 55"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					
Tuolumne County Public Health Dept.																			FB					
Sullivan Creek @ Algerine Rd		**TUO 207**		**37 55' 6"**	**120 23' 44"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					
Tuolumne River @ 7th Street Bridge		**STC 214**	**112 900 00**																					
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					
USGS	NAWQA					MX	MX	MX	MX	MX						MX	MX			A	A	A		A
Tuolumne River @ 9th Street Bridge		**STC 207**																						
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					
Tuolumne River @ Old La Grange Bridge		**STC 210**	**112 896 60**	**37 39' 60"**	**120 27' 60"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					
USGS	NAWQA																							
Dry Creek @ La Loma Rd		**STC 206**	**373 907 120.**	**37 38' 55"**	**120 58' 60"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					
USGS	NAWQA																			A	A			

W = Weekly

BM= Bimonthly 2x/month

M = Monthly

Q = Quarterly (October, January, April, July)

A = Annual

1=Gauged Site

2= Gauge/telemetered site

X=Storm sampling (2 storms, every 6 hours = 5 samples each storm per site)

B = Biannual 2x/year

Minerals =B, Cl, H_2SO_4, Ca, Mg, Total Hardness

Minerals =MID tests for: ??

TE=Trace Elements: Cu, Cr, Pb, Ni, Zn, Hg, As,Cd

B$= Proposed biannual 2x/year OP synoptic sampling

G= Monthly (Aug - Dec) Weekly (Jan - July)

SWAMP Ongoing Chilcott, J.

SWAMP Intensive Basin Jan 2003 - Apr 2004 Graham, C.

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USGS NAWQA: U.S. Geological Survey, National Water-Quality Assessment Program. 1992 to present

FB = Funding based fecal coliform

San Joaquin River Basin Rotational Sub-basin Monitoring: Eastside Basin, January 2003 – April 2004
(Stanislaus, Tuolumne, and Merced River Watersheds and Farmington and Valley Floor Drainage Areas

Site Location	Project/	SITE CODE					Water Column Analyses								Pesticides Scans					Sediment			Tox-test 96/ 48-hr	
Agency	funding	CVRWQCB	USGS	Latitude	Longitude	Flow	EC	pH	Temp	DO	Turb	B	Minerals	TE Total	OP	OC	TSS	TOC	Bacti	TE/Min	OC-Scan	Toxicity	Acute	Bio Assy
Tuolumne River @ Legion Park		**STC 216**		**37 37' 30"**	**120 58' 40"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM				Q	
Tuolumne River @ Audie Peeples (Riverdale) Fishing Access		**STC 215**																						
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM				Q	
Tuolumne River @ Shiloh Fishing Access		**STC 513**	**112 902 00**	**37 36' 10"**	**121 7' 50"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					
CVRWQCB	SWAMP						M	M	M	M	M						M		M					
USGS	NAWQA																							A
MID							M	M				M	M											
Merced River Watershed																								
Merced River @ Bagby		**MAR 201**		**37 36' 45"**	**120 8' 10"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					
Merced River @ Merced Falls (Gauging Station)		**STC 209**		**37 31' 4"**	**120 22' 34"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					
Merced River @ Highway 99		**MER 202**		**37 23' 60"**	**120 44' 58"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					
Merced River @ River Road (near Hatfield Park)		**MER 546**	**112 735 00**	**37 21' 10"**	**120 57' 45"**																			
CVRWQCB	Intensive Basin						BM	BM	BM	BM	BM		M	M			BM	BM	BM					
CVRWQCB	SWAMP						M	M	M	M	M						M		M					
USGS	NAWQA					MX	MX	MX	MX	MX					M		MX	MX						A

W = Weekly
BM= Bimonthly 2x/month
M = Monthly
Q = Quarterly (October, January, April, July)
A = Annual

1=Gauged Site
2= Gauge/telemetered site
X=Storm sampling (2 storms, every 6 hours = 5 samples each storm per site)
B = Biannual 2x/year

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Minerals =MID tests for: ??
TE=Trace Elements: Cu, Cr, Pb, Ni, Zn, Hg, As,Cd
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SWAMP Ongoing Chilcott, J.
SWAMP Intensive Basin Jan 2003 - Apr 2004 Graham, C.
MID: Modesto Irrigation District
USGS NAWQA: U.S. Geological Survey, National Water-Quality Assessment Program. 1992 to present
FB = Funding based fecal coliform

Appendix E:
Outreach Effort

Winston H. Hickox
Secretary for Environmental Protection

California Regional Water Quality Control Board
Central Valley Region
Robert Schneider, Chair

Gray Davis
Governor

Sacramento Main Office
Internet Address: http://www.swrcb.ca.gov/rwqcb5
3443 Routier Road, Suite A, Sacramento, California 95827-3003
Phone (916) 255-3000 • FAX (916) 255-3015

8 July 2002

To: Interested Parties

WATER QUALITY STUDY ON THE TUOLUMNE, STANISLAUS, AND MERCED WATERSHEDS

Staff from the Central Valley Regional Water Quality Control Board (CVRWQCB) have been participating in the statewide Surface Water Ambient Monitoring Program (SWAMP) since October 2000. The goal of the statewide program is to evaluate the overall health of surface water bodies in California. The initial focus of SWAMP in the San Joaquin River Basin has been the development of long-term monitoring stations along the main stem of the river and in representative water bodies draining tributary watersheds. In the spring of 2002, we began a Rotational Intensive Basin Monitoring Program (IBP) as part of SWAMP. The objective of the IBP is a more thorough evaluation of the surface water quality within the tributary watersheds once every five years.

To implement the IBP, watersheds that are tributary to the San Joaquin River have been grouped into five basins. Each year approximately twenty sampling sites, which represent different aspects (such as land use) of the watershed, are selected in one of the basins. As funding permits total suspended solids, electrical conductivity, pH, temperature, dissolved oxygen, turbidity, total coliform, E. Coli, and photo monitoring are conducted at each site, twice a month for a 12 month period. Additional constituents may also be considered.

Monitoring for the first year of the IBP started in January 2002 in the Cosumnes, Mokelumne and Calaveras Watersheds. We are currently preparing a monitoring plan for the next basin, which will consist of the Stanislaus, Tuolumne, and Merced River Watersheds. As we develop the plan, we would like to identify and coordinate with existing programs, with the possibility of forming cooperative relationships to share data. We are also asking local interest groups to identify issues/areas that should be considered as we choose our monitoring sites.

Attached you will find a questionnaire for the Stanislaus, Tuolumne, and Merced River watersheds. Please take a couple minutes to fill it out and return it to us. You may fold the questionnaire in thirds (so that the address on the back appears) seal, stamp and mail the form back to us. Your input is of great value to us and strongly appreciated. If you know of any existing programs or have any concerns regarding this watershed or the CVRWQCB's efforts in this area, please feel free to contact me either by phone at (916) 255-6314 or by email at grahamc@rb5s.swrcb.ca.gov. If you know of any other agencies or organizations with an interest in this watershed, please forward them a copy of this letter.

CATHERINE GRAHAM
Environmental Scientist
San Joaquin Watershed Unit

Attachment
cc: List Attached

Winston H. Hickox
Secretary for Environmental Protection

California Regional Water Quality Control Board

Central Valley Region

Robert Schneider, Chair

Gray Davis
Governor

Sacramento Main Office
Internet Address: http://www.swrcb.ca.gov/rwqcb5
3443 Routier Road, Suite A, Sacramento, California 95827-3003
Phone (916) 255-3000 • FAX (916) 255-3015

28 April 2003

To: Interested Parties

WATER QUALITY STUDY ON THE TUOLUMNE, STANISLAUS, AND MERCED WATERSHEDS AND FARMINGTON AND EAST VALLEY FLOOR DRAINAGE AREAS

Earlier this year, you should have received a letter from the Central Valley Regional Water Quality Control Board regarding the Rotational Intensive Basin Monitoring Program to be conducted in your area from January through December 2003. Responses to the letter were considered during the development of said program.

Recent budget constraints have necessitated a re-evaluation of the extent of the program. We delayed the onset of sampling until February and have limited analyses to temperature, dissolved oxygen, pH, electrical conductivity, and E. Coli at approximately 25 sites, twice a month (see Table 1). Other constituents, such as trace elements, toxicity, total suspended solids, and total organic carbon will be included when and if funding becomes available.

If you have any concerns regarding this watershed or the monitoring program, please feel free to contact me either by phone at (916) 255-6314 or by email at grahamc@rb5s.swrcb.ca.gov.

CATHERINE GRAHAM
Environmental Scientist
San Joaquin Watershed Unit

Attachments
cc: List Attached

Mailing List for the Intensive Basin Monitoring Program: Phase 2

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Turlock, CA 95382

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Bylsma Bros
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Fresno, CA 93726

CA INT Waste Management Board
Don Dier, Jr
Messenger, E-10

CA Natural Resources Foundation
Ronn Slay
1151 Kadota Ave.
Atwater, CA 95301

CA Save our Streams Council
Lloyd Carter
616 W Lamona Ave
Fresno, CA 93728-2225

CAL EPA
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CA Asbestos Monofill
George Jackson
PO Box 127
Copperopolis, CA 95228

CA Energy Commission
Joseph O'Hagan
1516 9th St.
Messenger F-1, MS40

CALTRANS
Lee Taubeneck
650 Howe Ave., Ste 400
Messenger, F-30

Capitol Press
Robert Palomares
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Modesto, Ca 95356

Central Sierra Environment
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PO Box 396
Twain Harte, CA 95383-0396

Central Sierra Watershed Coalition
Rick Breeze-Martin
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Sonora, CA 95370

Ceres, City of WWTP
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Ceres, CA 95307

Citizens For Safe Water
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Modesto, CA 95357-8093

Citizens For Safe Water
Dan Gottlieb
1720 Angelene Dr.
Modesto, Ca 95355-4312

City of Atwater
John Haug
750 Bellevue Rd.
Atwater, CA 95301

City of Ceres
Joe Holstein
2720 Second St
Ceres, CA 95307

City of Ceres
Steve Wilson
2720 Second St
Ceres, CA 95307

City of Livingston
William Eldridge
1416 C ST
Livingston,, CA 95335

*Full mail list opens in Adobe Acrobat in electronic format and is available upon request

Appendix F:
Spatial and Temporal Graphs not Included in Section 8.1, Individual Watershed Discussion

Appendix F: Spatial and Temporal Graphs not Included in Section 8.1, Individual Watershed Discussion

Temperature

Figure F - 1 Summary Temperature: Stanislaus Watershed, January 2003 - April 2004

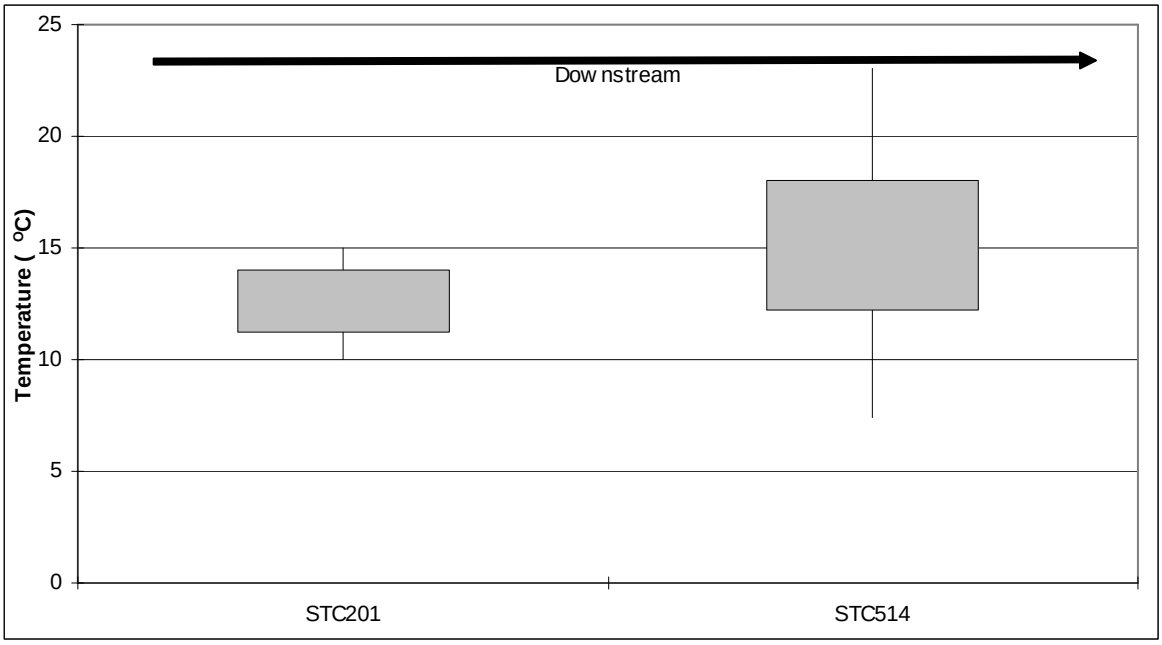


Figure F - 2 Biweekly Temperature: Stanislaus Watershed, January 2003 - April 2004

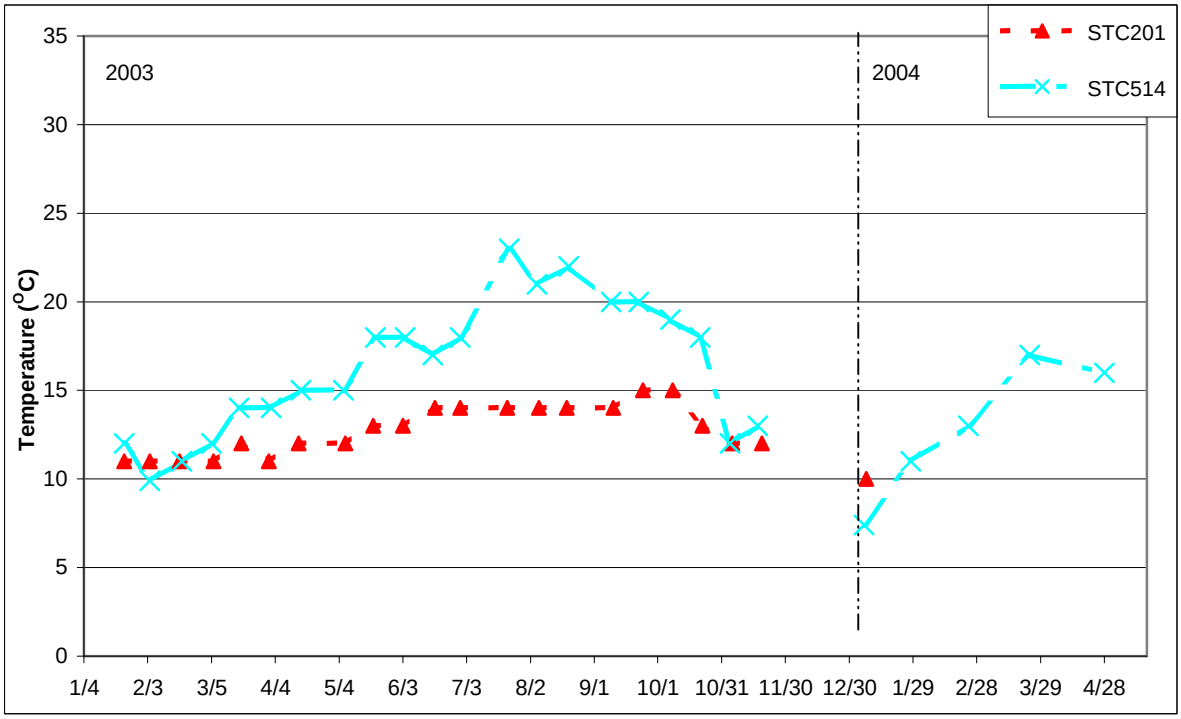


Figure F - 3 Summary Temperature: Merced Watershed, January 2003 - April 2004

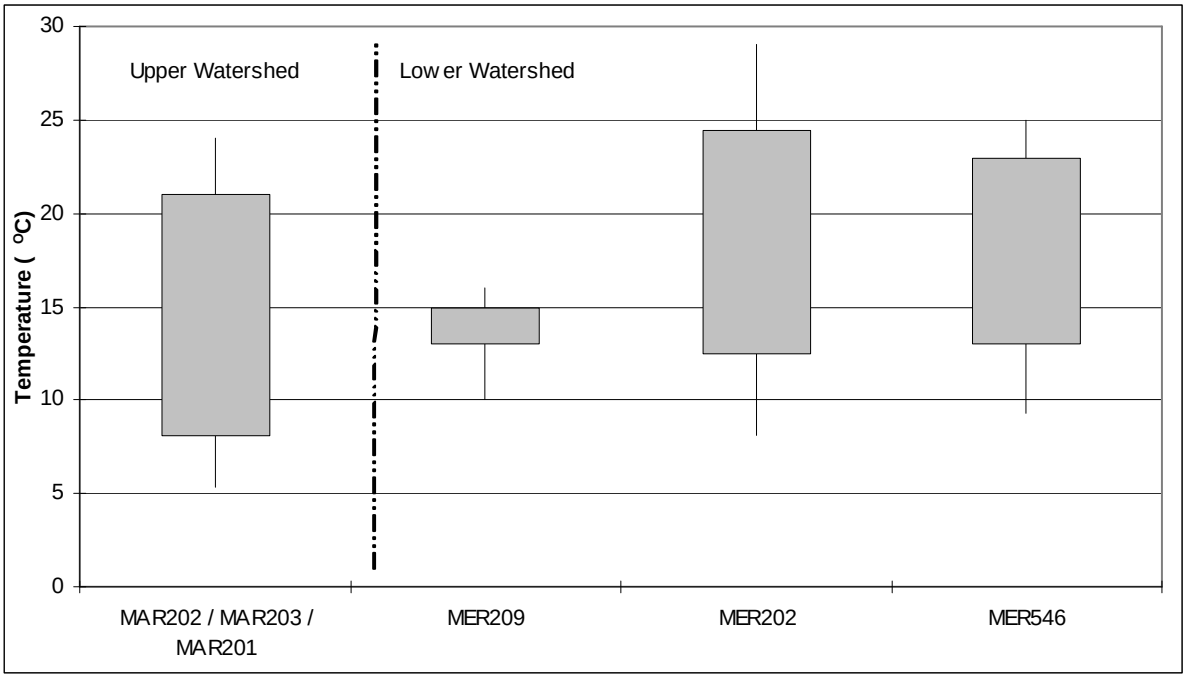
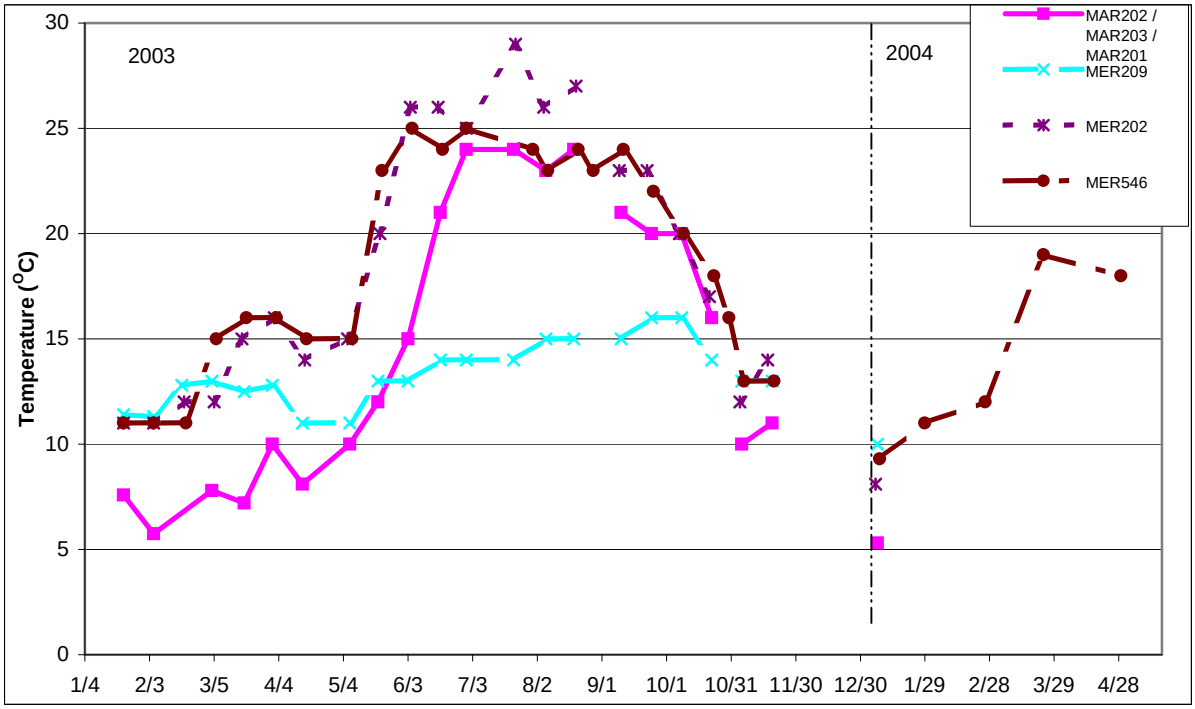


Figure F - 4 Biweekly Temperature: Merced Watershed, January 2003 - April 2004



Dissolved Oxygen

Figure F - 5 Biweekly Dissolved Oxygen: Stanislaus Watershed, January 2003 - April 2004

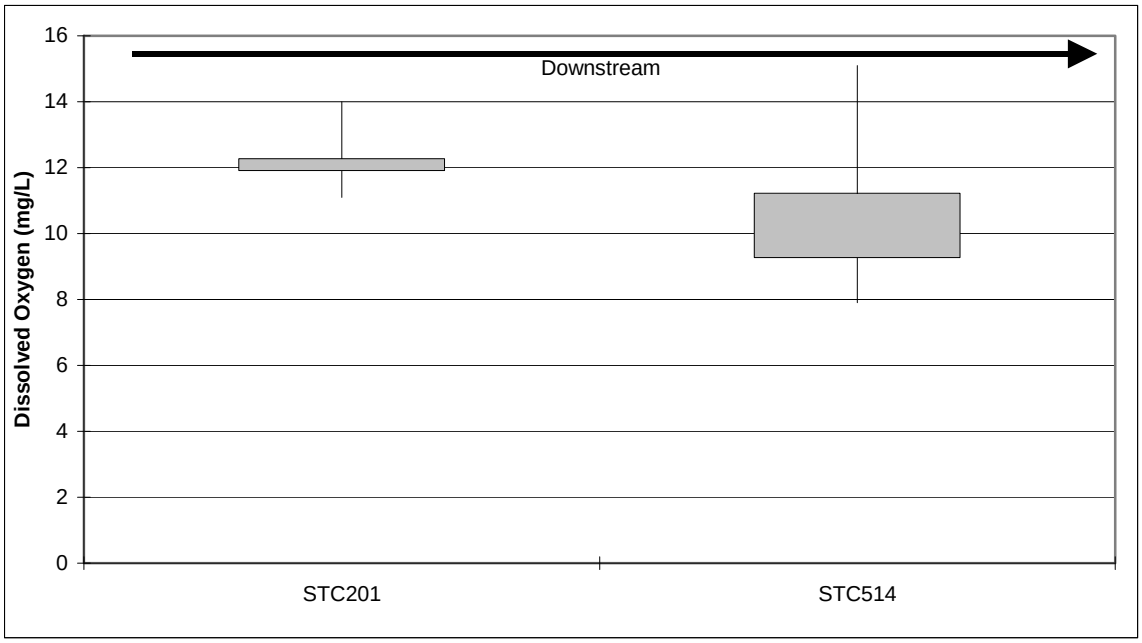


Figure F - 6 Biweekly Dissolved Oxygen: Stanislaus Watershed, January 2003 - April 2004

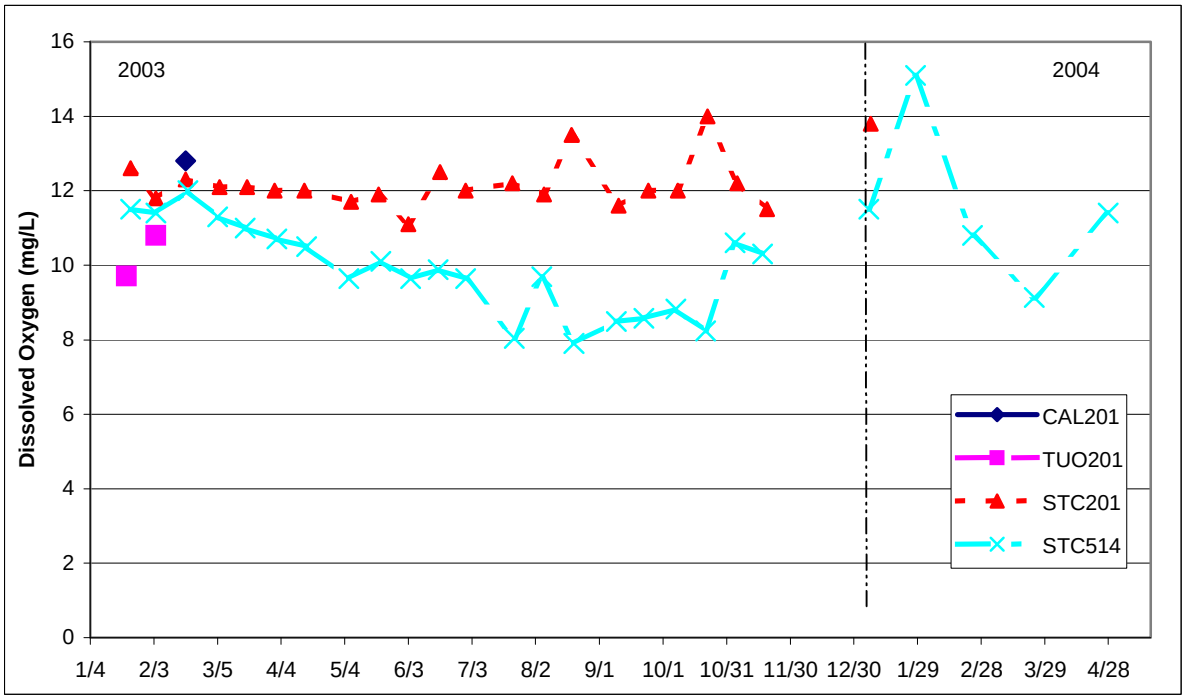


Figure F - 7 Summary Dissolved Oxygen: Merced Watershed, January 2003 - April 2004

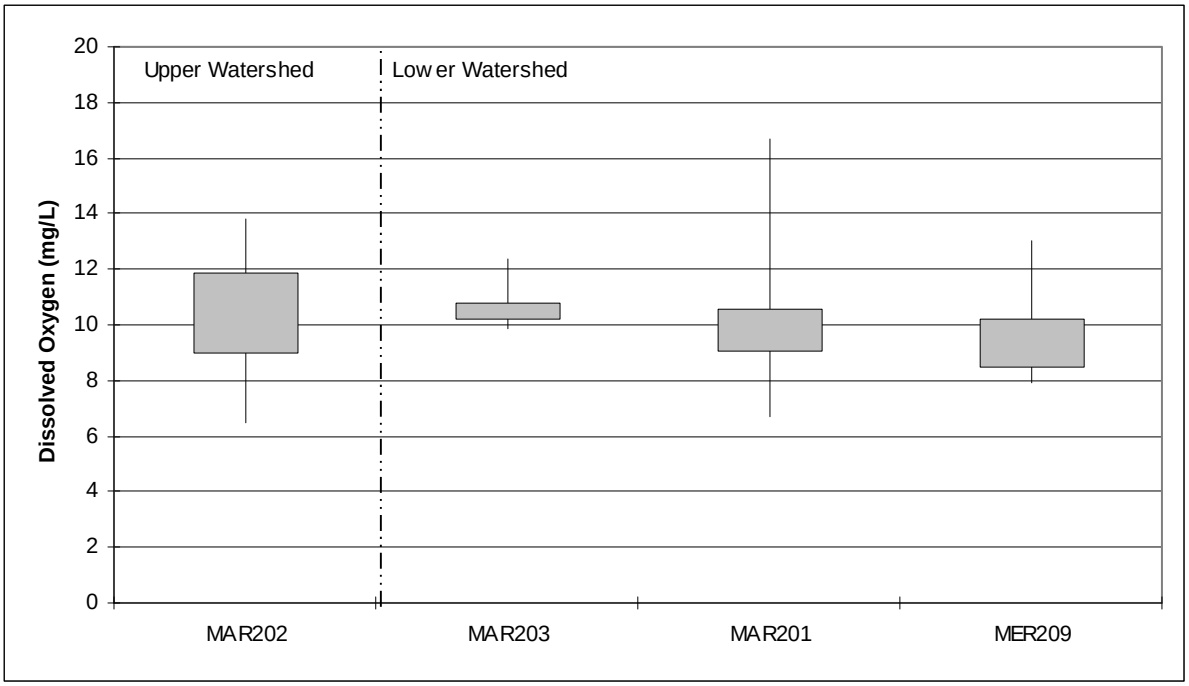
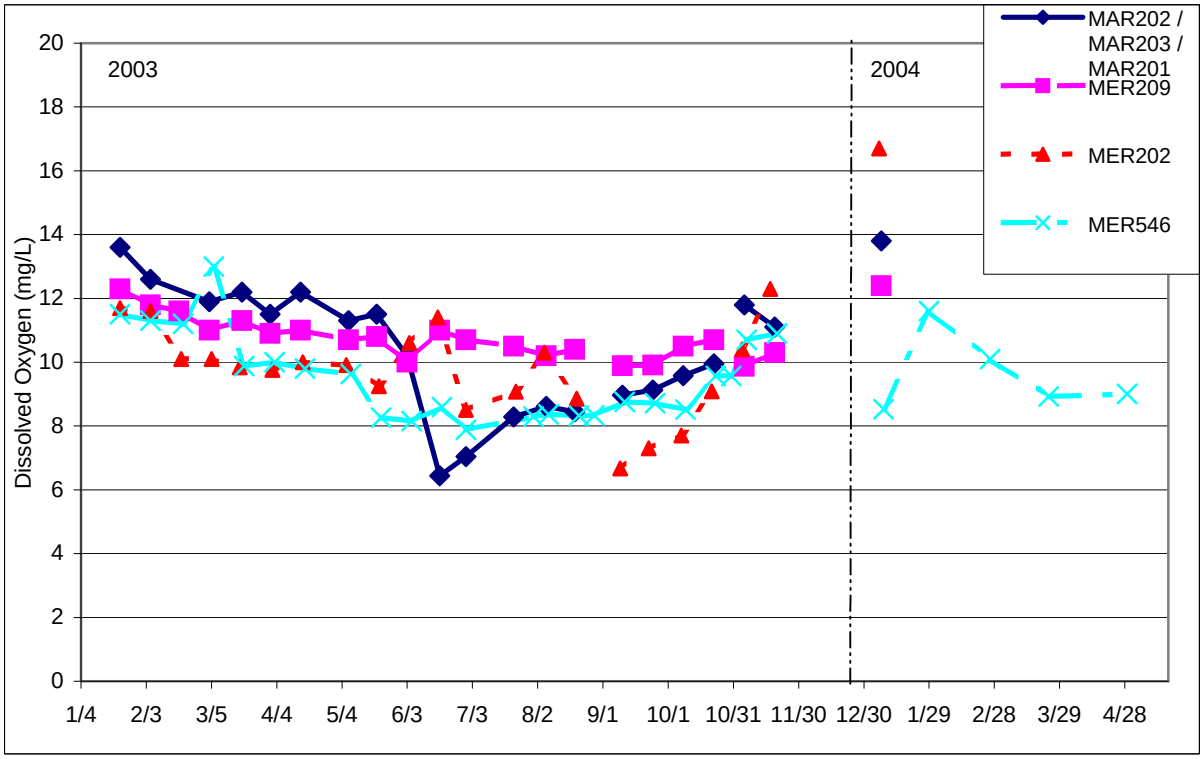


Figure F - 8 Biweekly Dissolved Oxygen: Merced Watershed, January 2003 - April 2004



Electrical Conductivity

Figure F - 9 Summary Electrical Conductivity: Stanislaus Watershed, January 2003 - April 2004

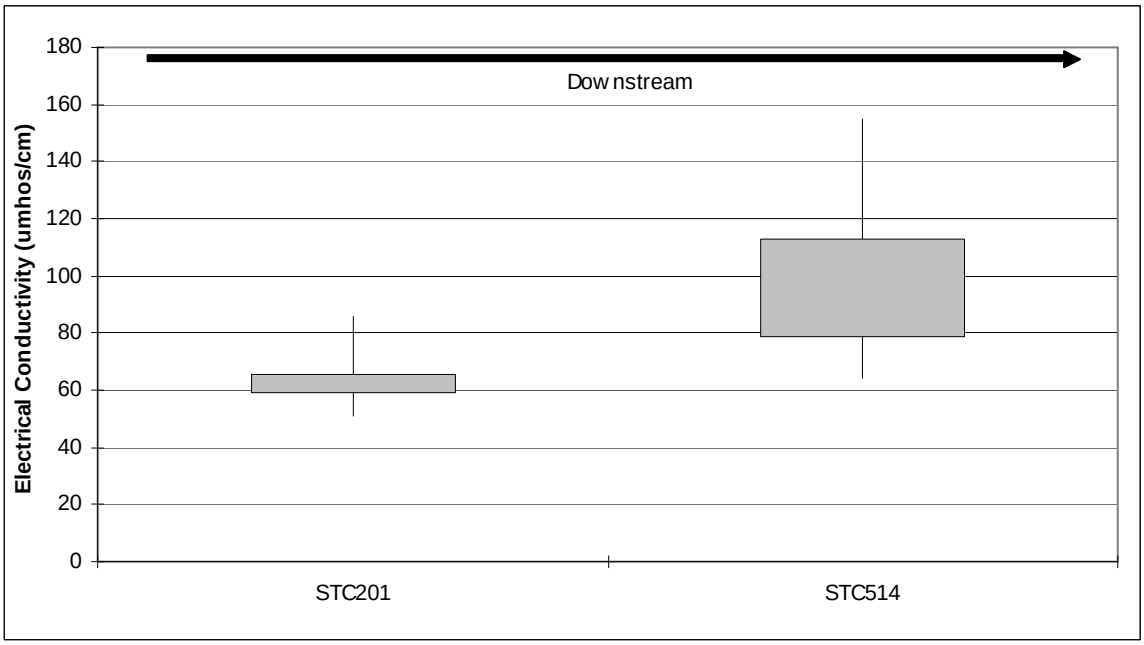


Figure F - 10 Biweekly Electrical Conductivity: Stanislaus Watershed, January 2003 - April 2004

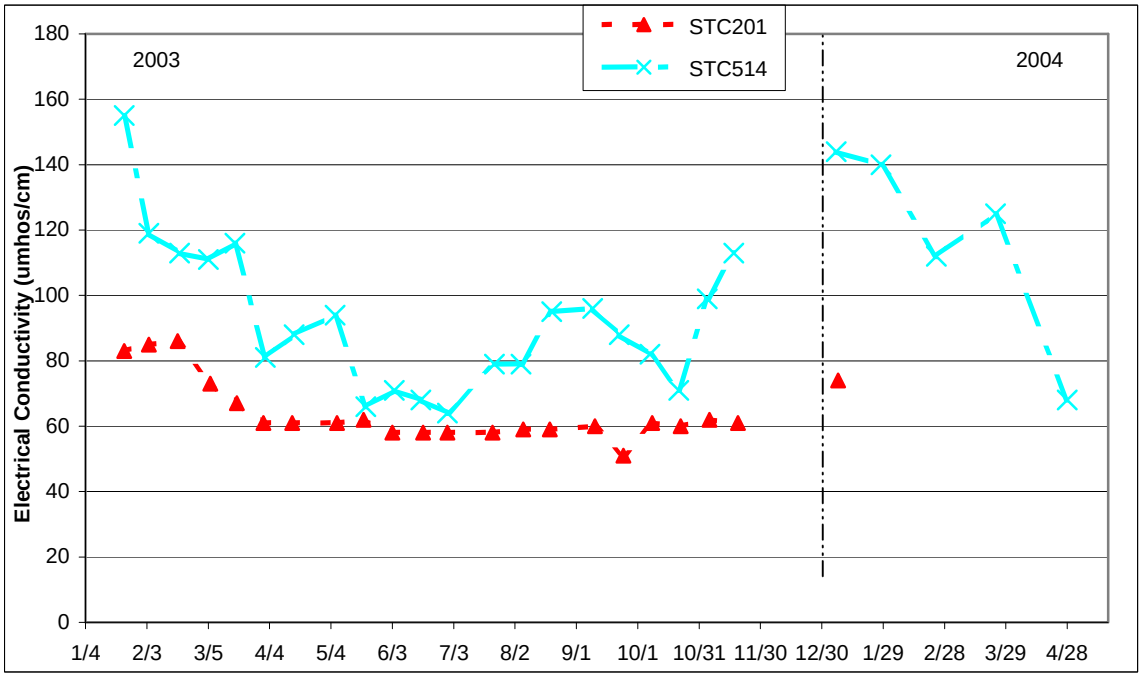


Figure F - 11 Summary Electrical Conductivity: Merced Watershed, January 2003 - April 2004

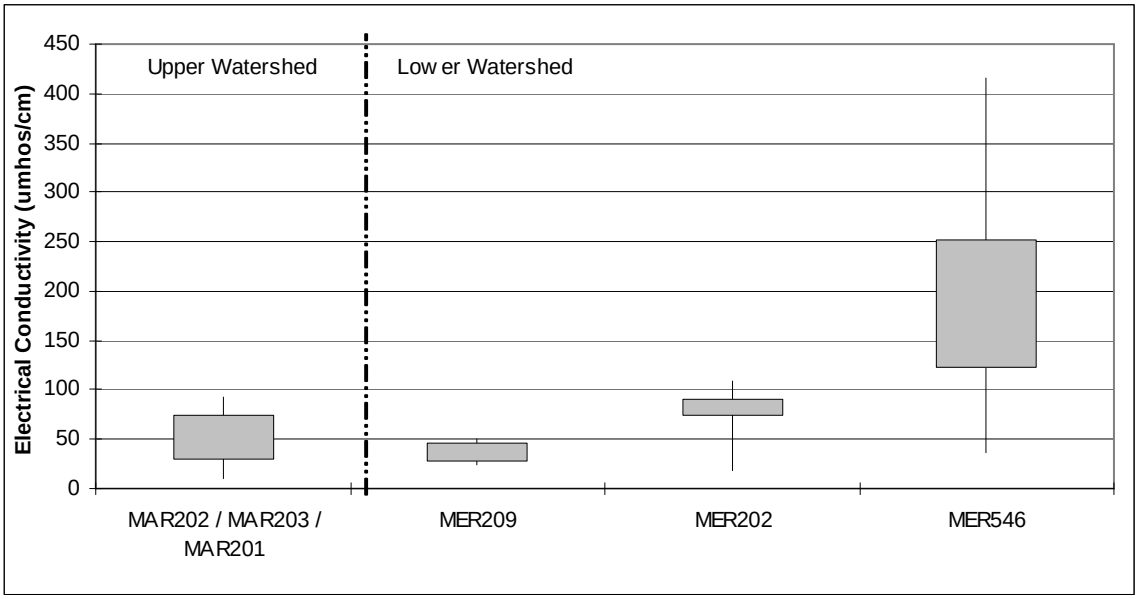
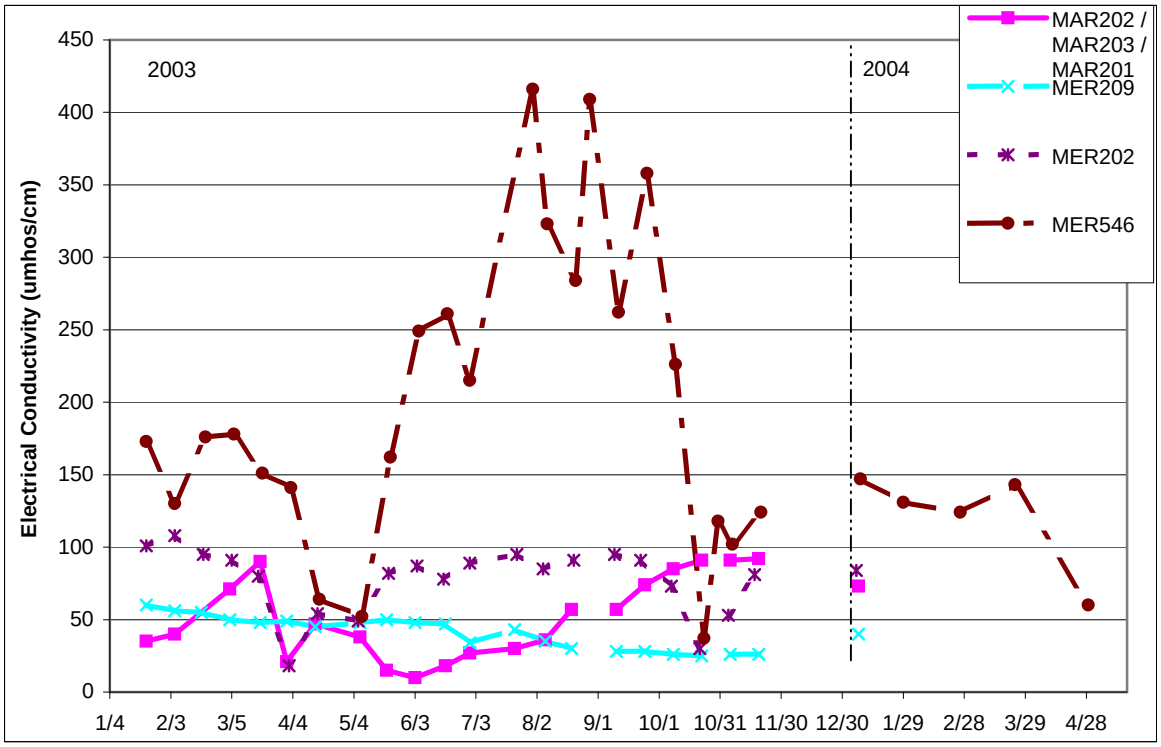


Figure F - 12 Biweekly Electrical Conductivity: Merced Watershed, January 2003 - April 2004



pH

Figure F - 13 Summary pH: Stanislaus Watershed, January 2003 - April 2004

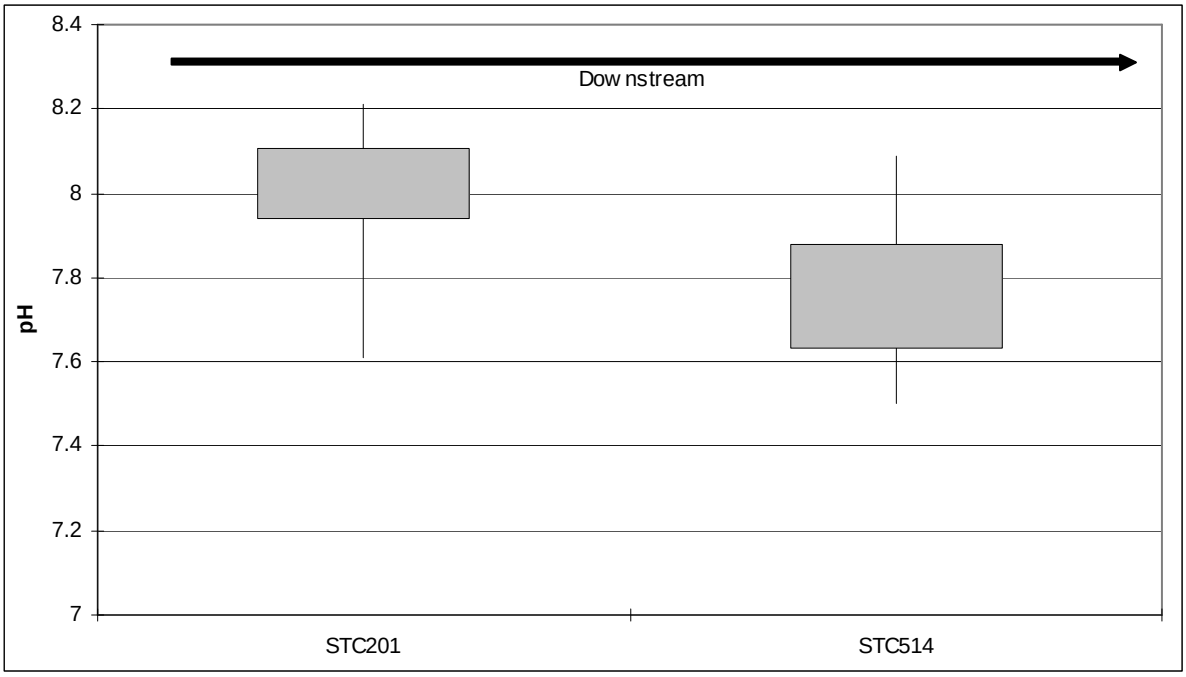


Figure F - 14 Biweekly pH: Stanislaus Watershed, January 2003 - April 2004

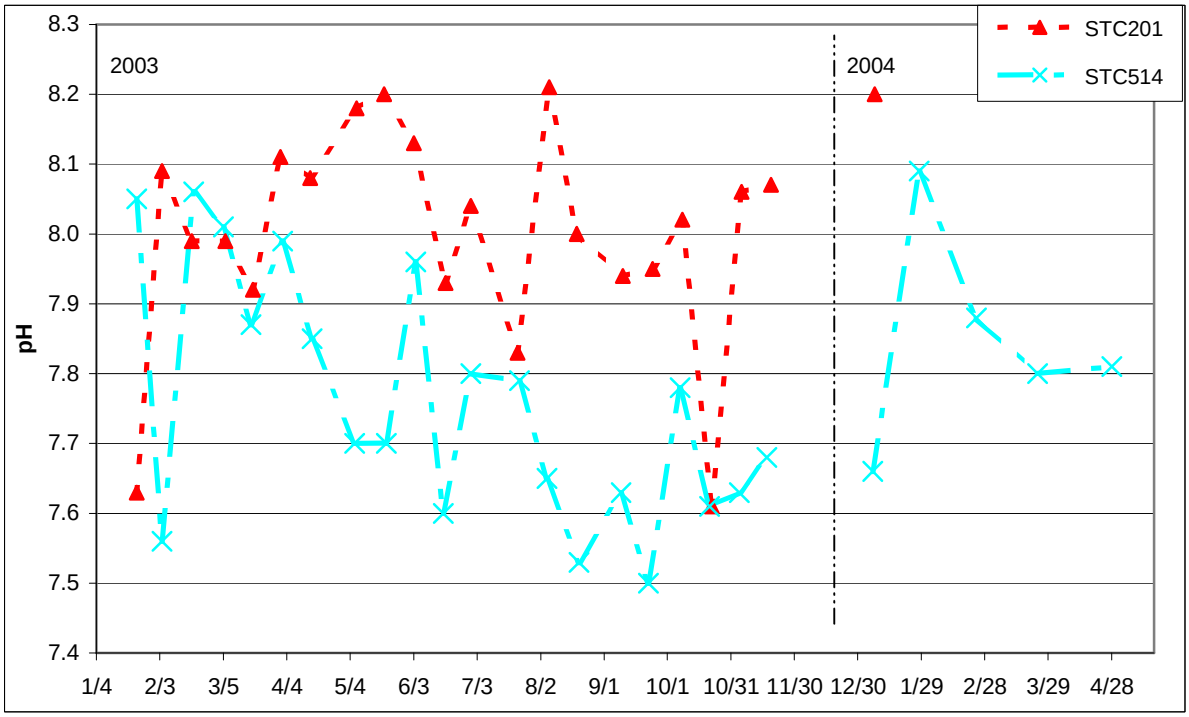


Figure F - 15 Summary pH: Merced Watershed, January 2003 - April 2004

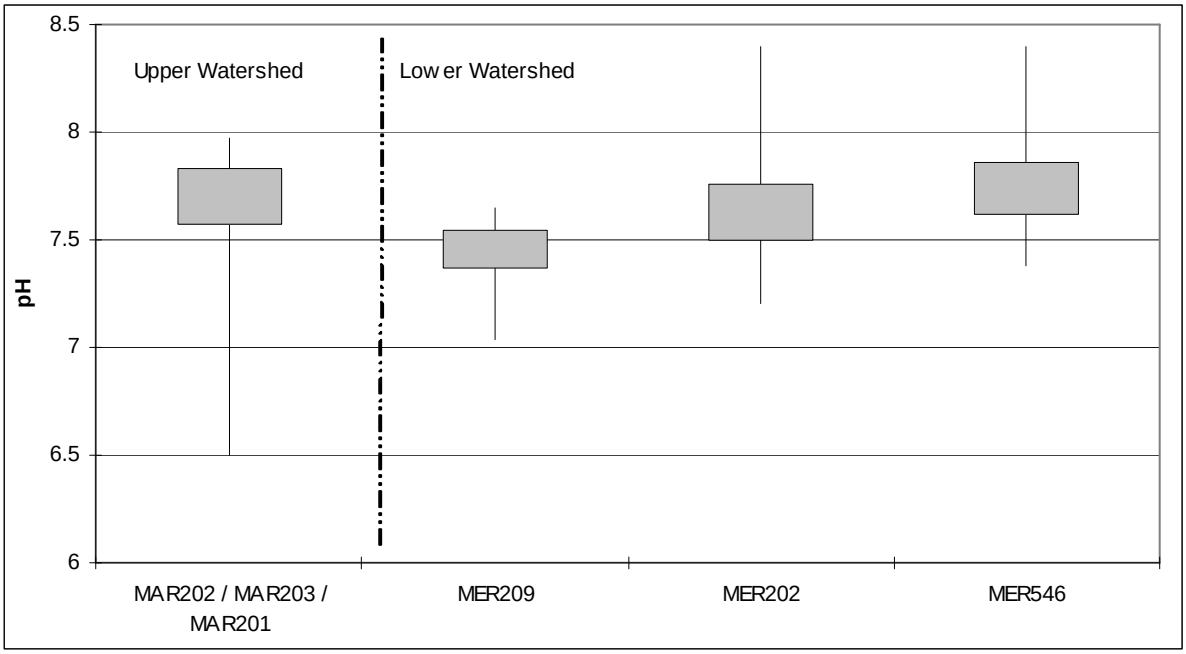
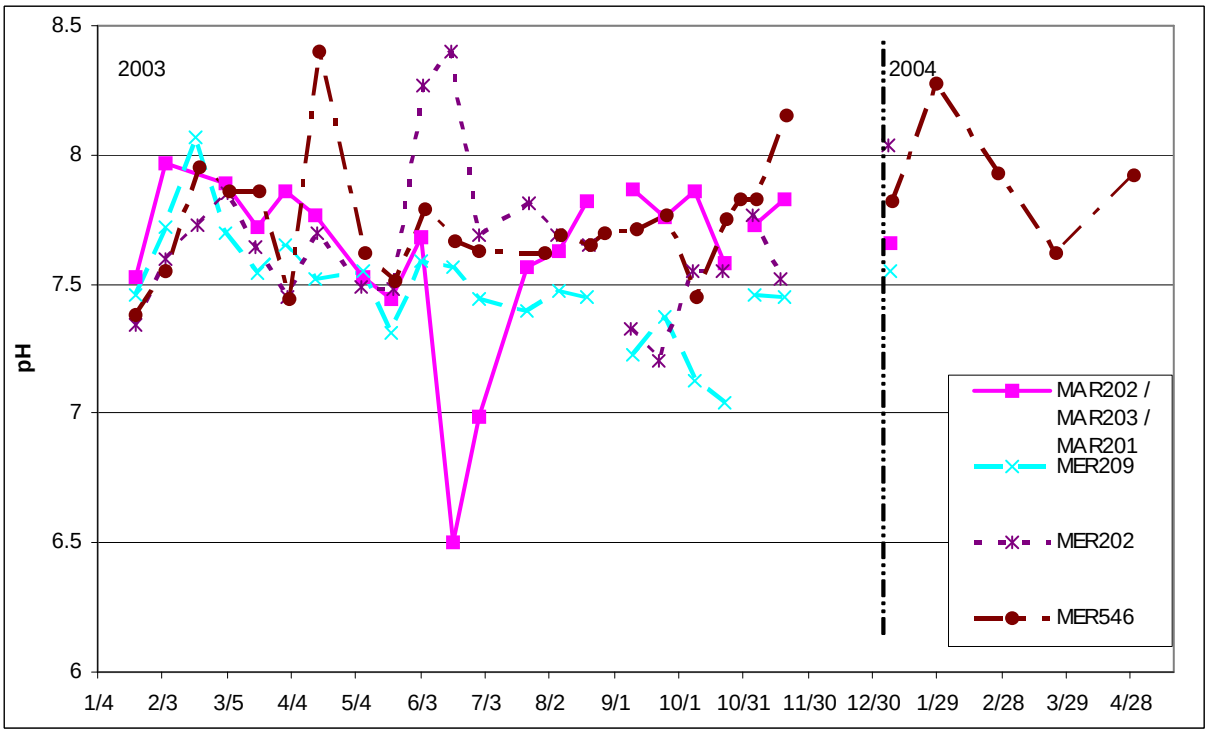


Figure F - 16 Biweekly pH: Merced Watershed, January 2003 - April 2004



Turbidity

Figure F - 17 Summary Turbidity: Stanislaus Watershed, January 2003 - April 2004

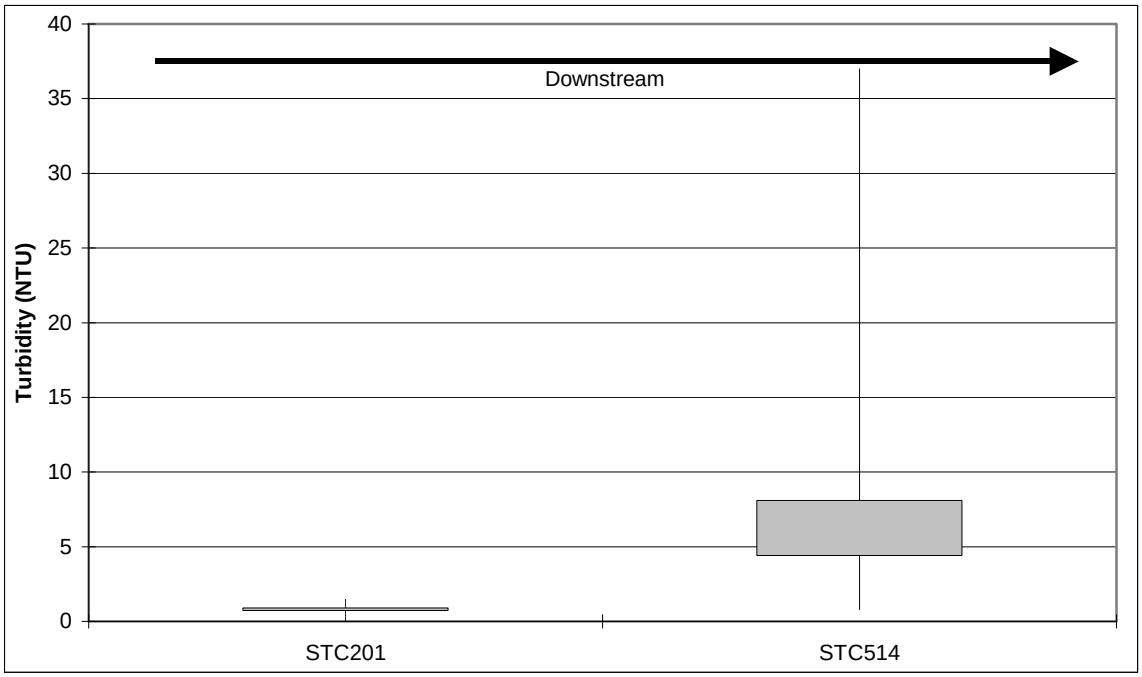


Figure F - 18 Biweekly Turbidity: Stanislaus Watershed, January 2003 - April 2004

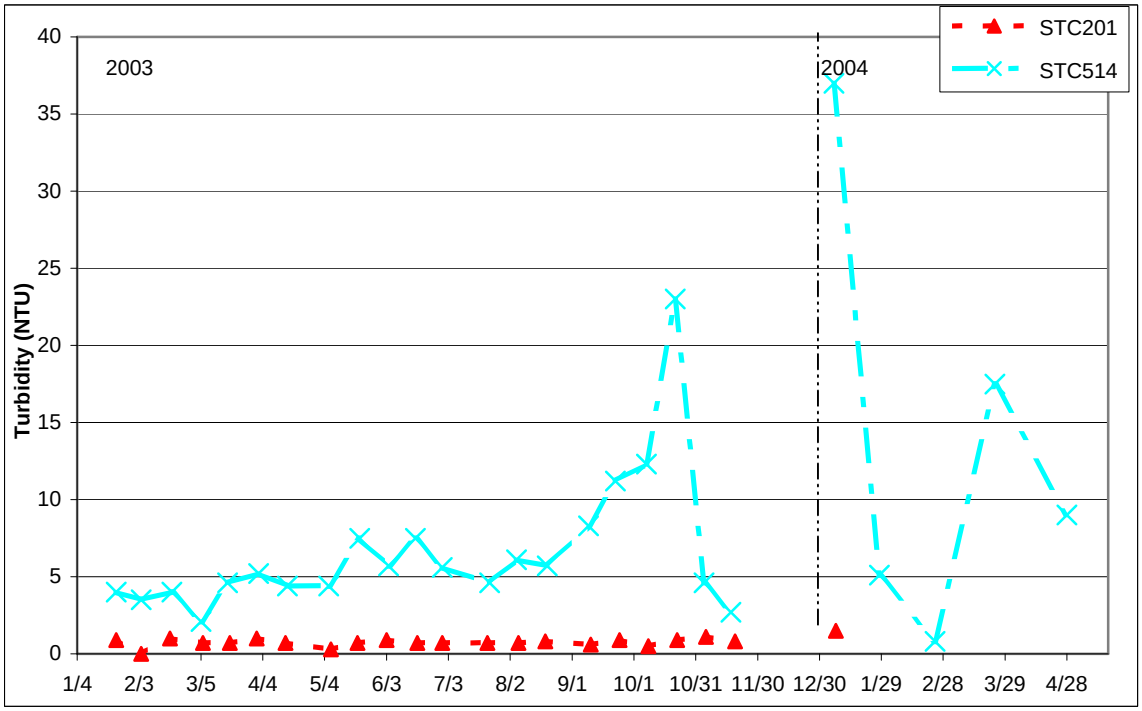


Figure F - 19 Summary Turbidity: Merced Watershed, January 2003 - April 2004

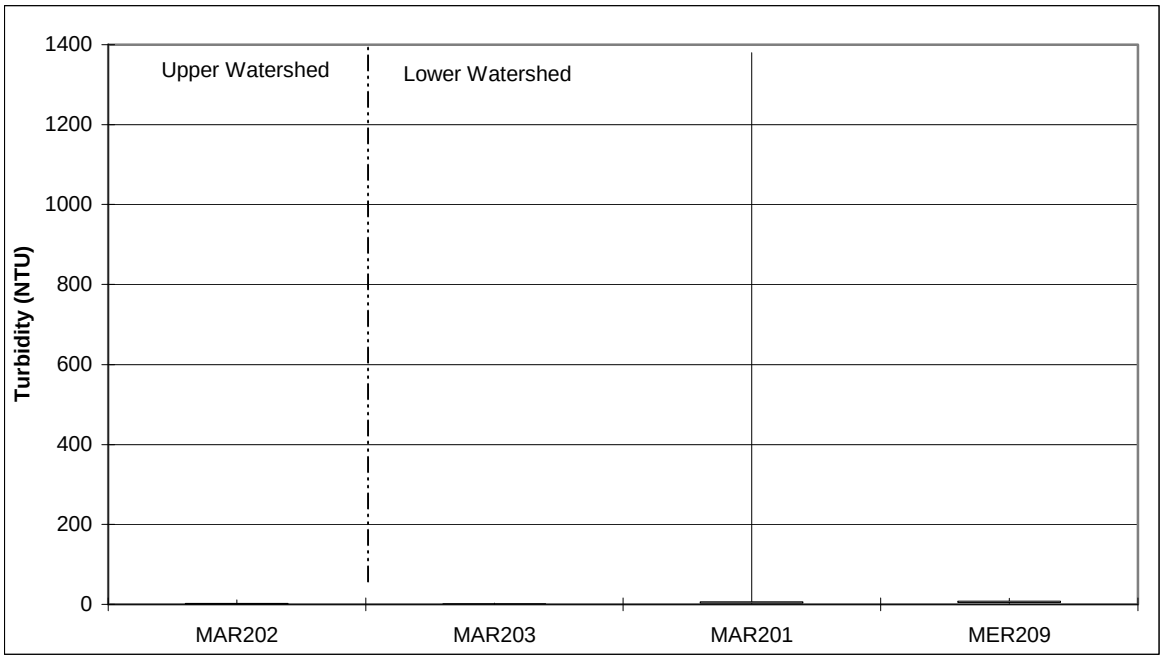
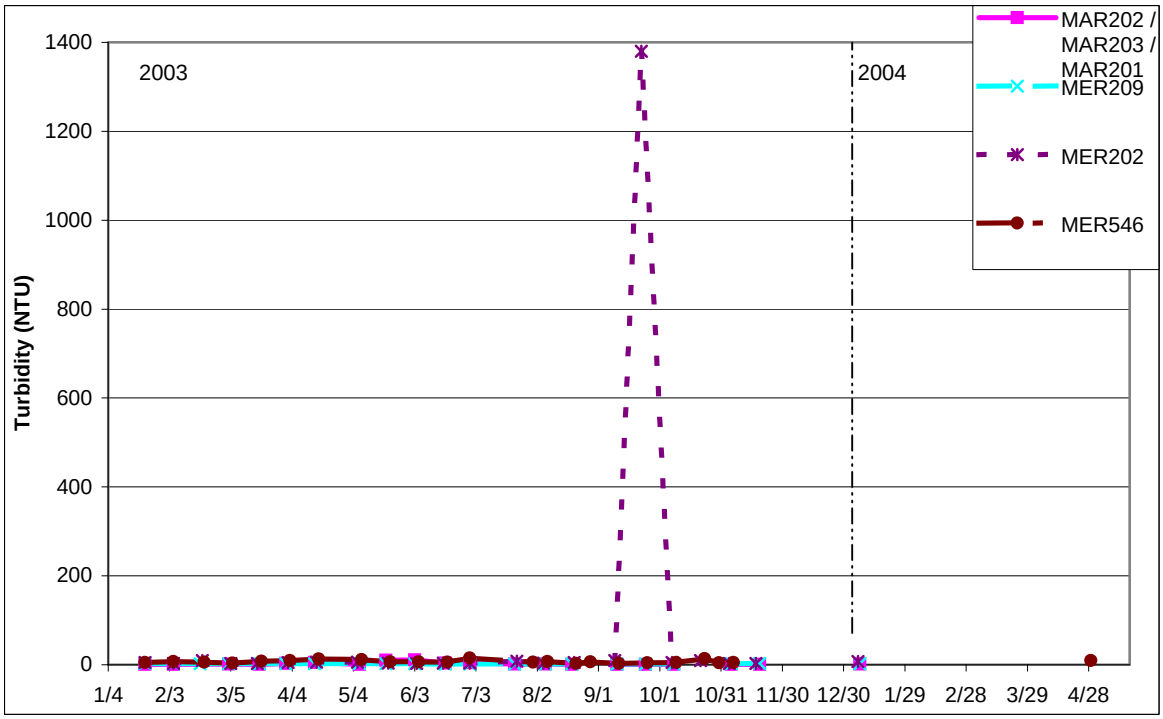


Figure F - 20 Biweekly Turbidity: Merced Watershed, January 2003 - April 2004



Total Organic Carbon

Figure F - 21Summary TOC: Farmington Drainage Area, January 2003 - April 2004

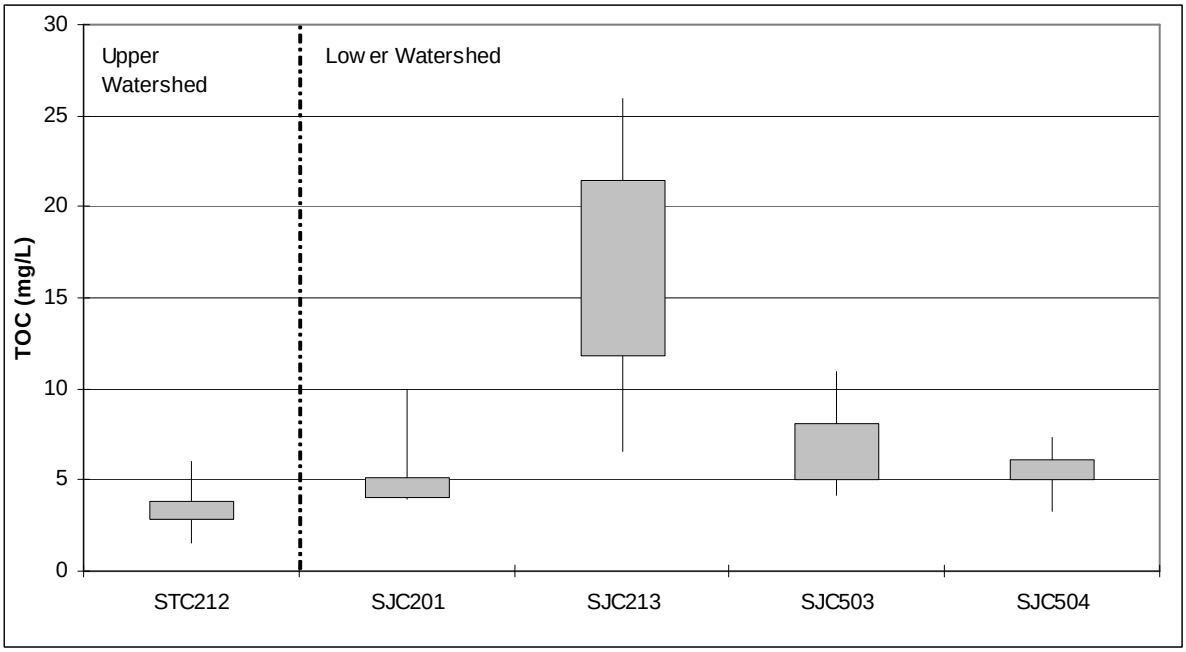


Figure F - 22 Biweekly TOC: Farmington Drainage Area, January 2003 - April 2004

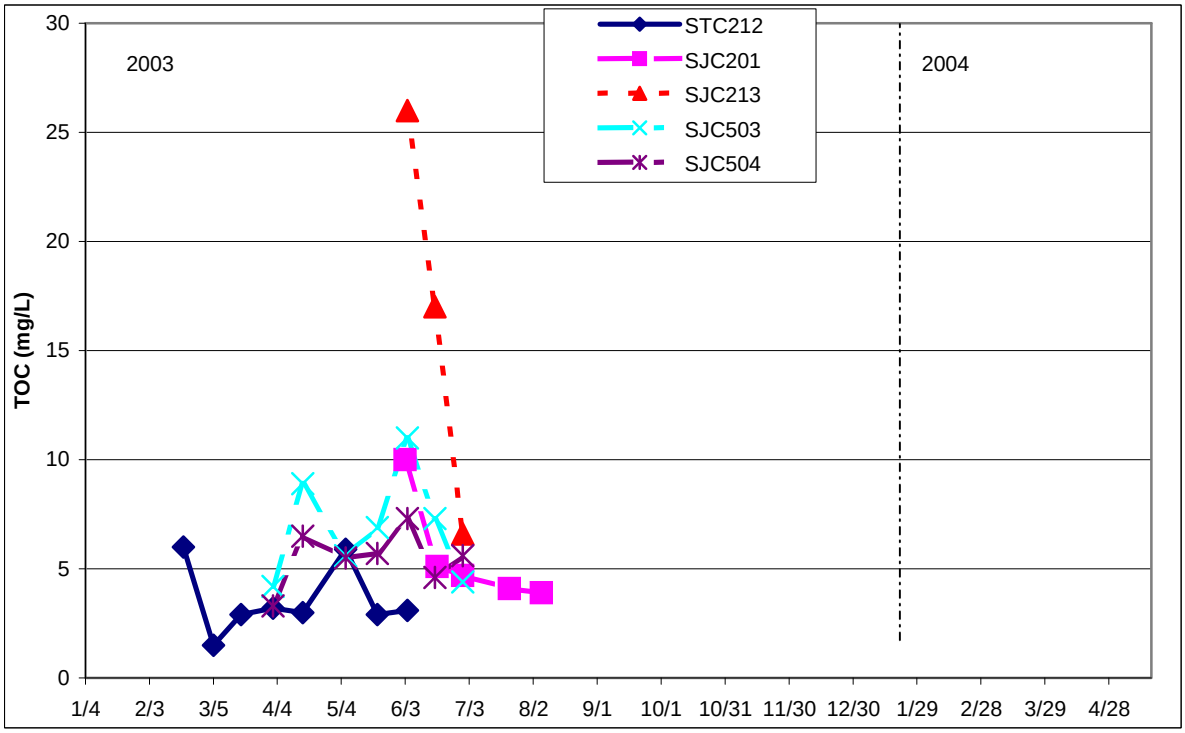


Figure F - 23 Summary TOC: Valley Floor Drainage Area, January 2003 - April 2004

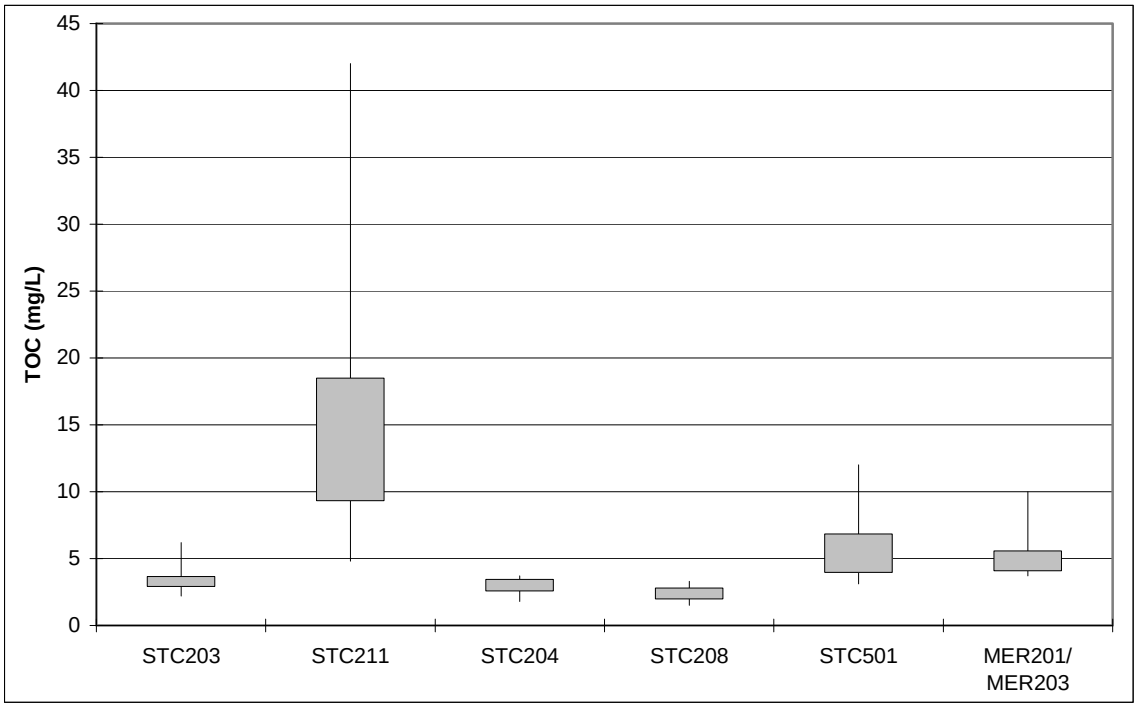


Figure F - 24 Biweekly TOC: Valley Floor Drainage Area, January 2003 - April 2004

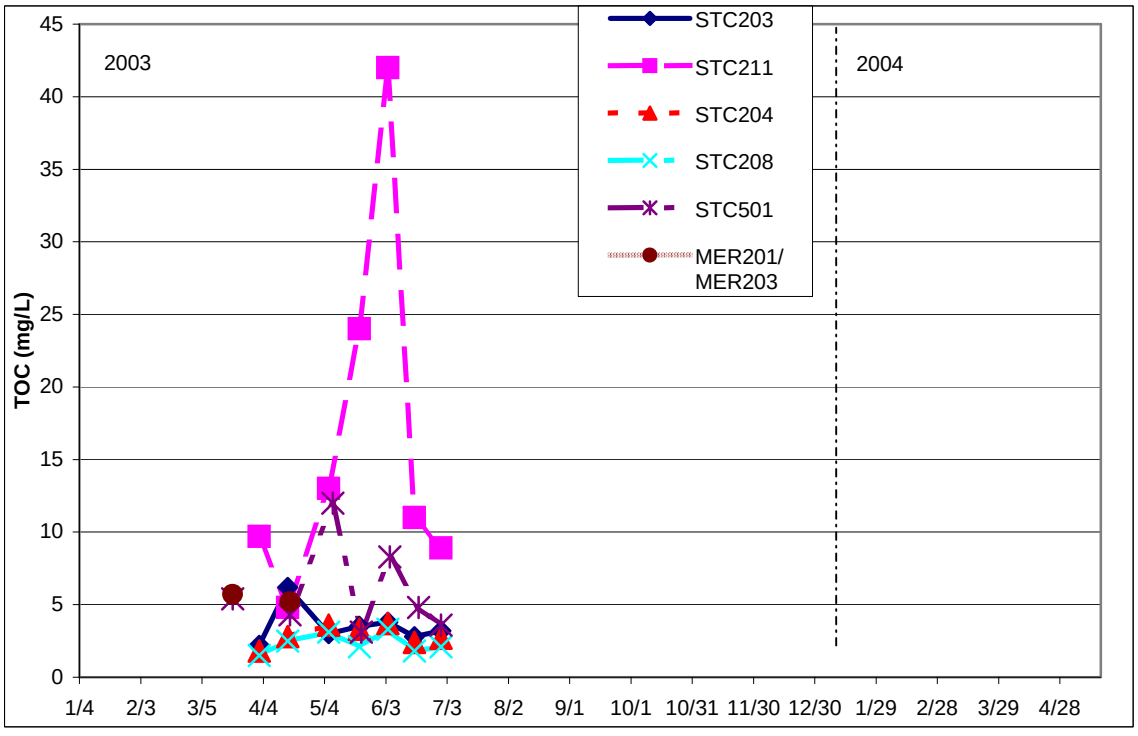


Figure F - 25 Summary TOC: Stanislaus Watershed, January 2003 - April 2004

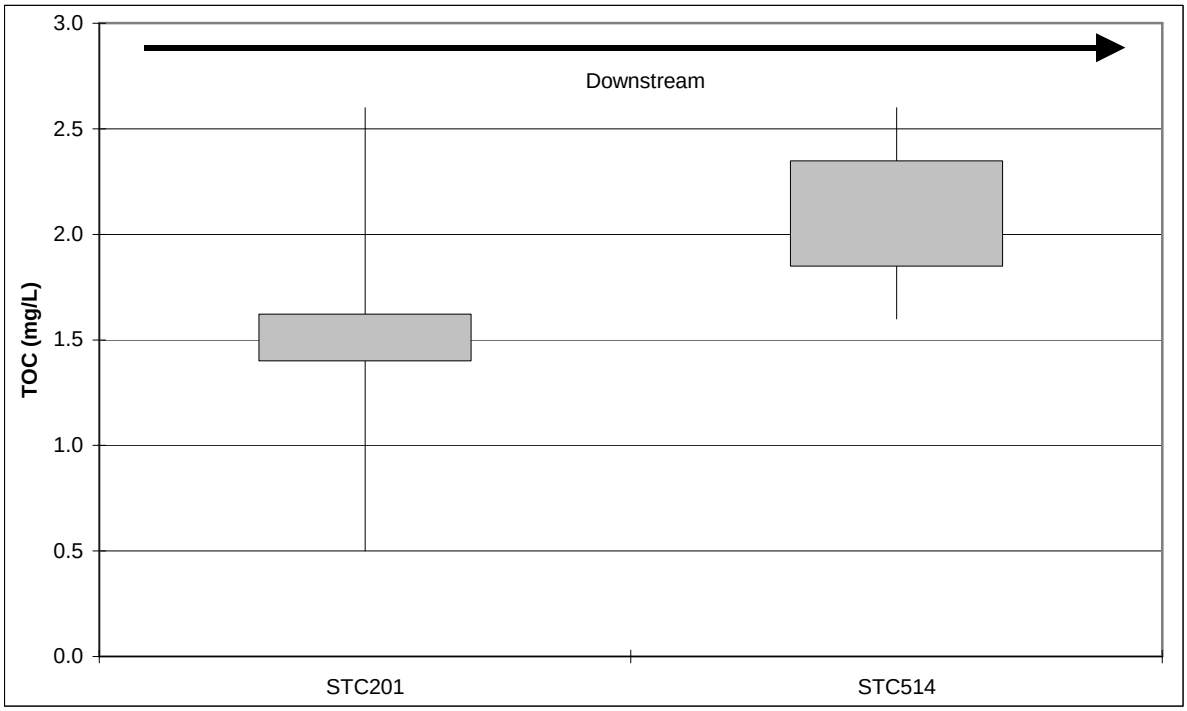


Figure F - 26 Biweekly TOC: Stanislaus Watershed, January 2003 - April 2004

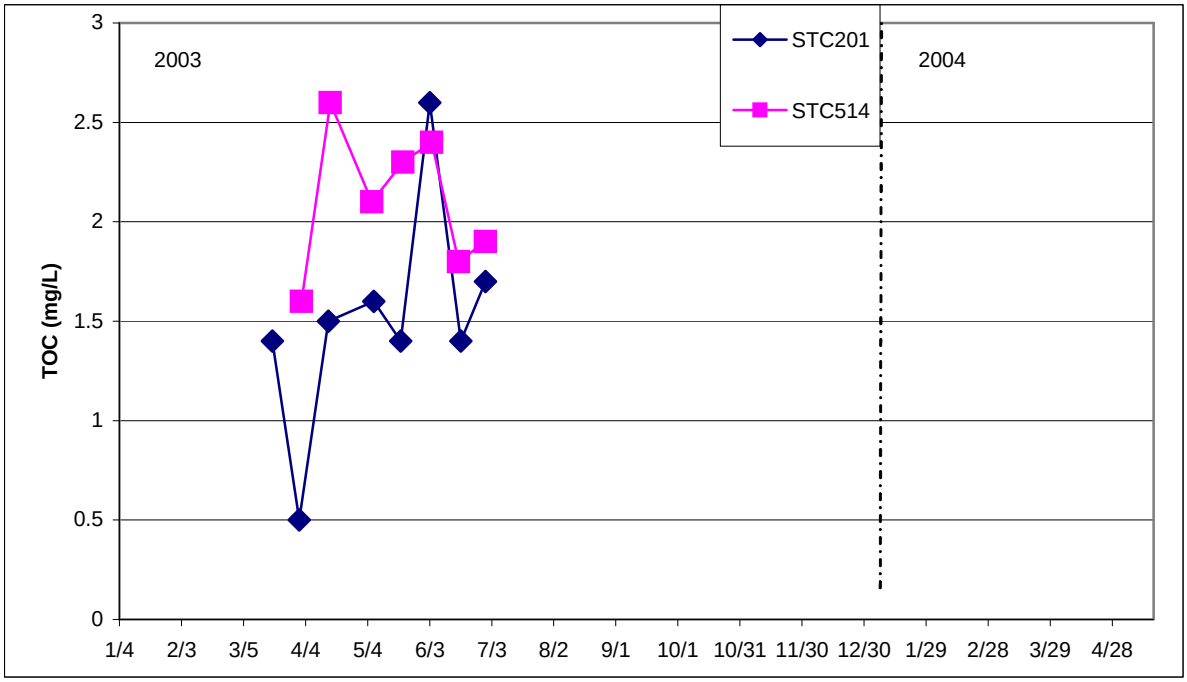


Figure F - 27Summary TOC: Tuolumne Main Stem, January 2003 - April 2004

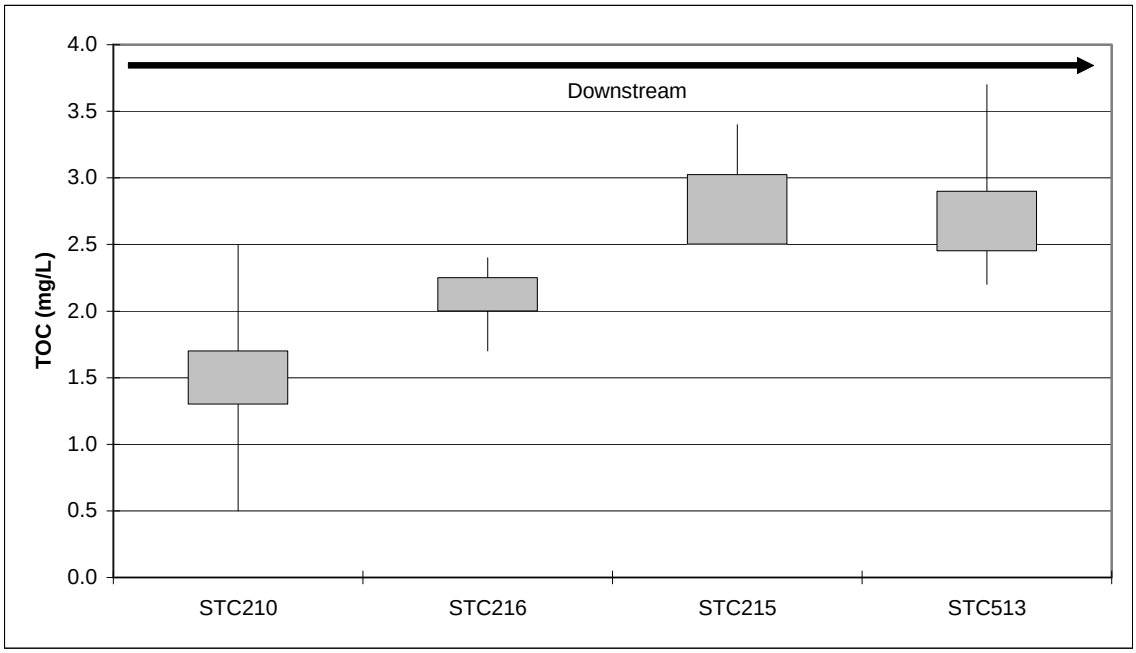


Figure F - 28 Biweekly TOC: Tuolumne Main Stem, January 2003 - April 2004

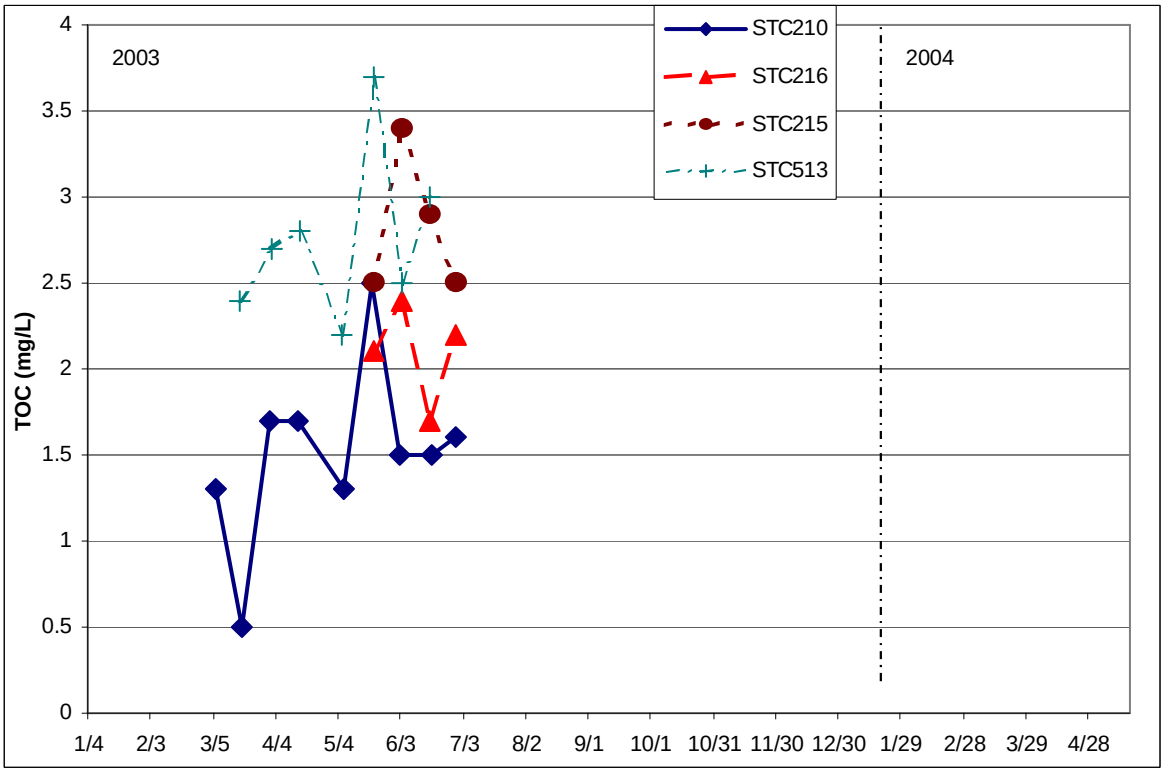


Figure F - 29Summary TOC: Tuolumne Tributaries, January 2003 - April 2004

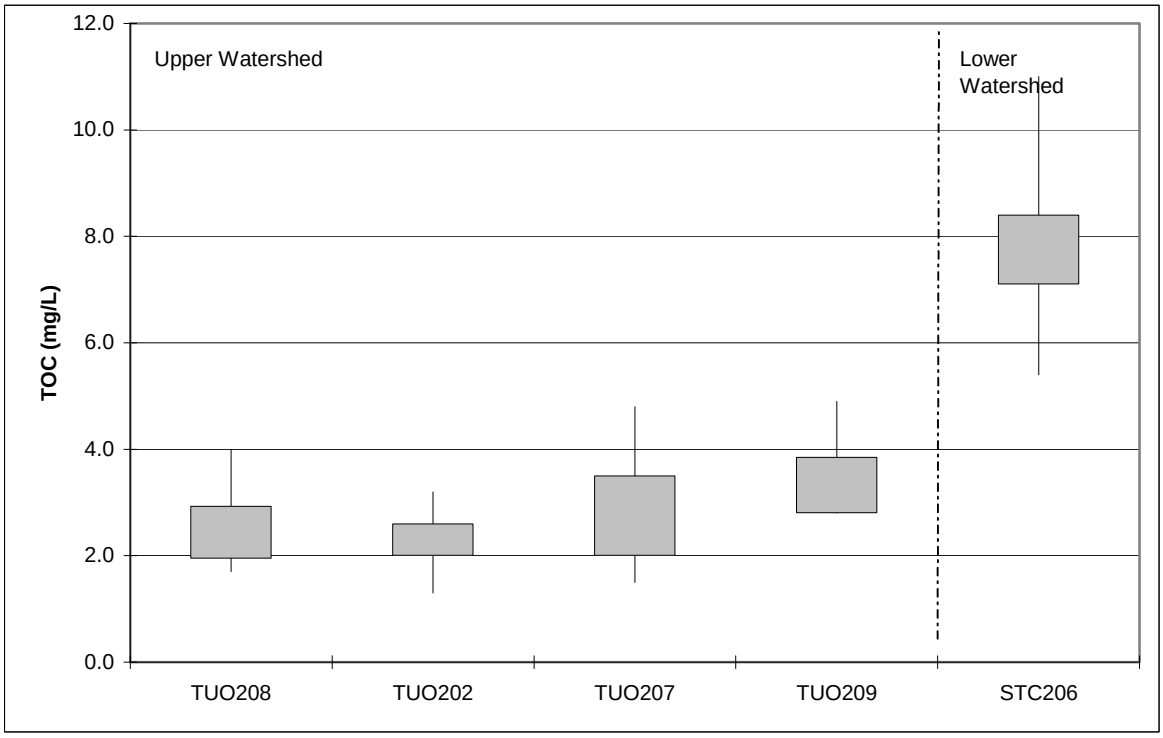


Figure F - 30Biweekly TOC: Tuolumne Tributaries, January 2003 - April 2004

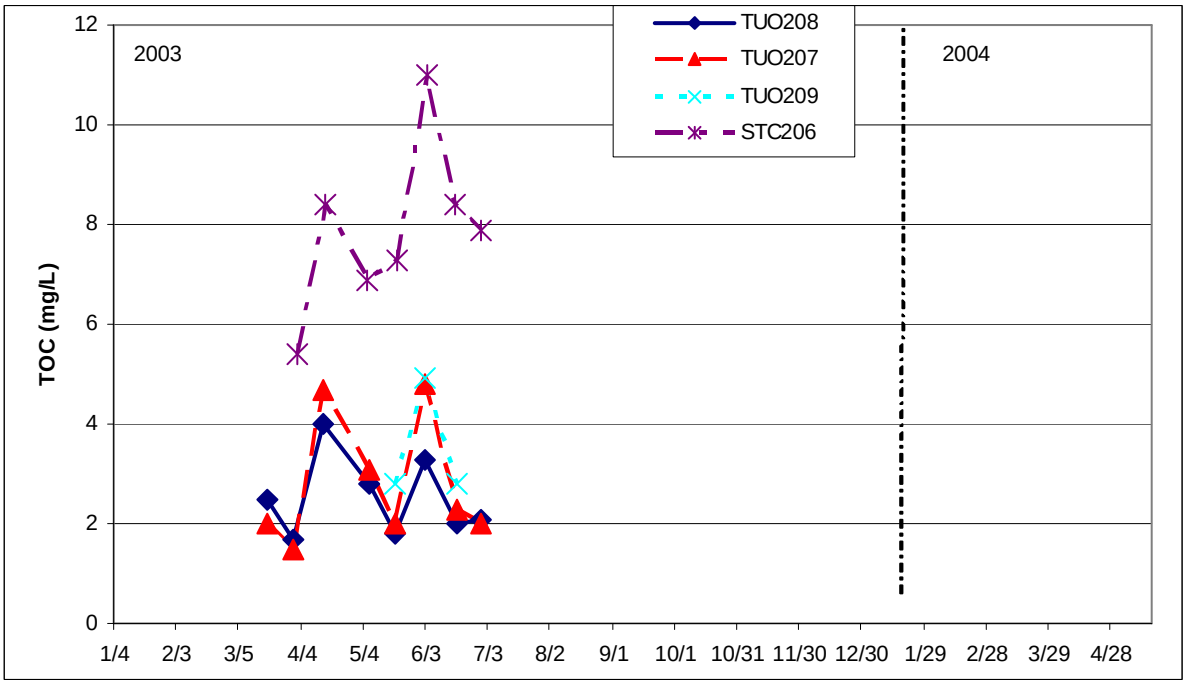


Figure F - 31Summary TOC: Merced Watershed, January 2003 - April 2004

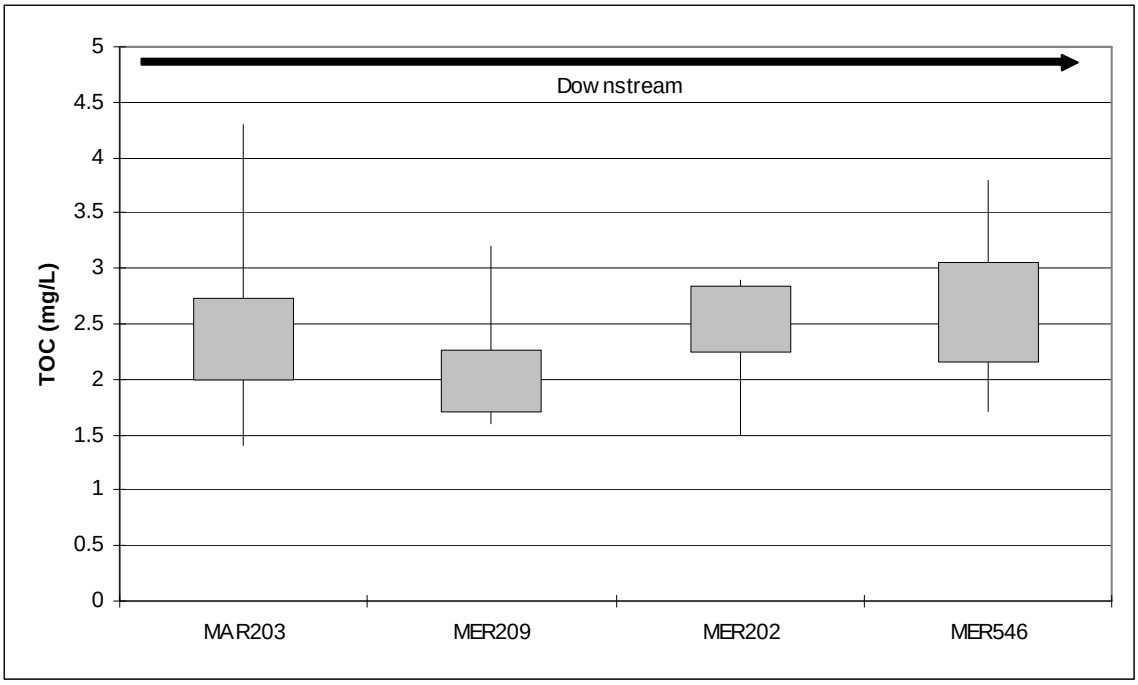
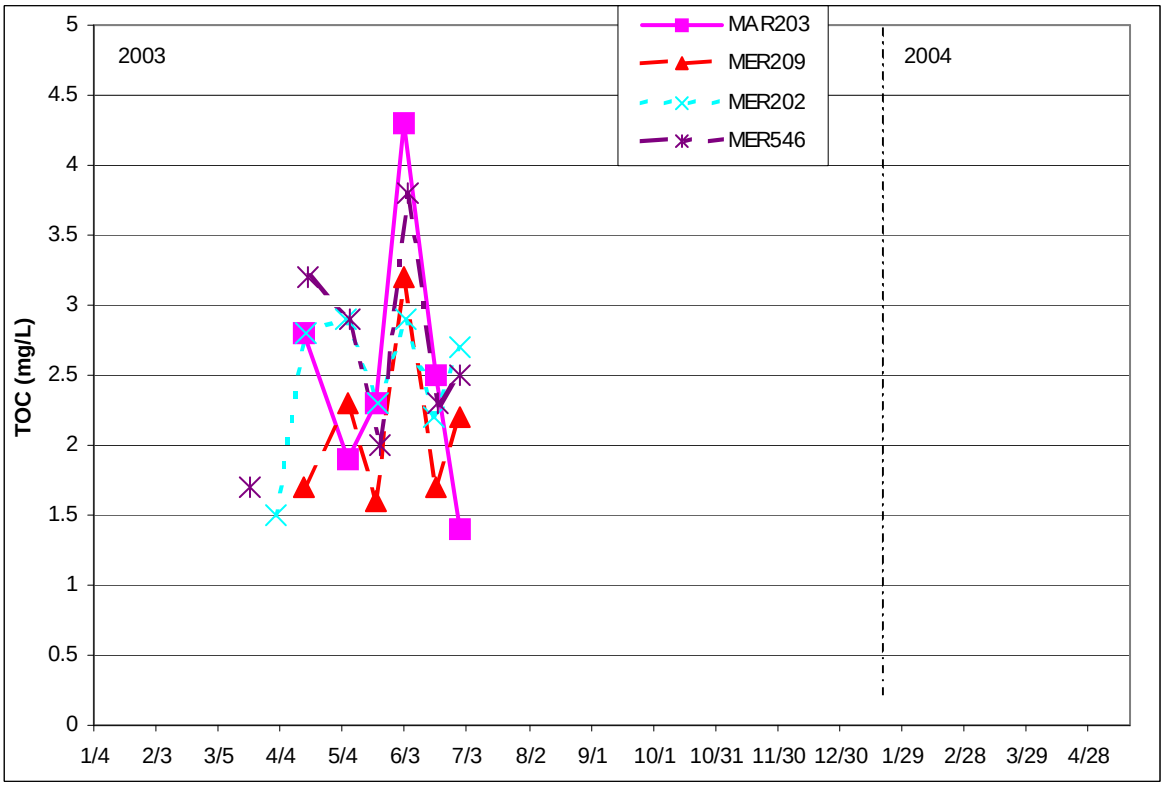


Figure F - 32Biweekly TOC: Merced Watershed, January 2003 - April 2004



Total Suspended Solids

Figure F - 33 Summary TSS: Farmington Drainage Area, January 2003 - April 2004

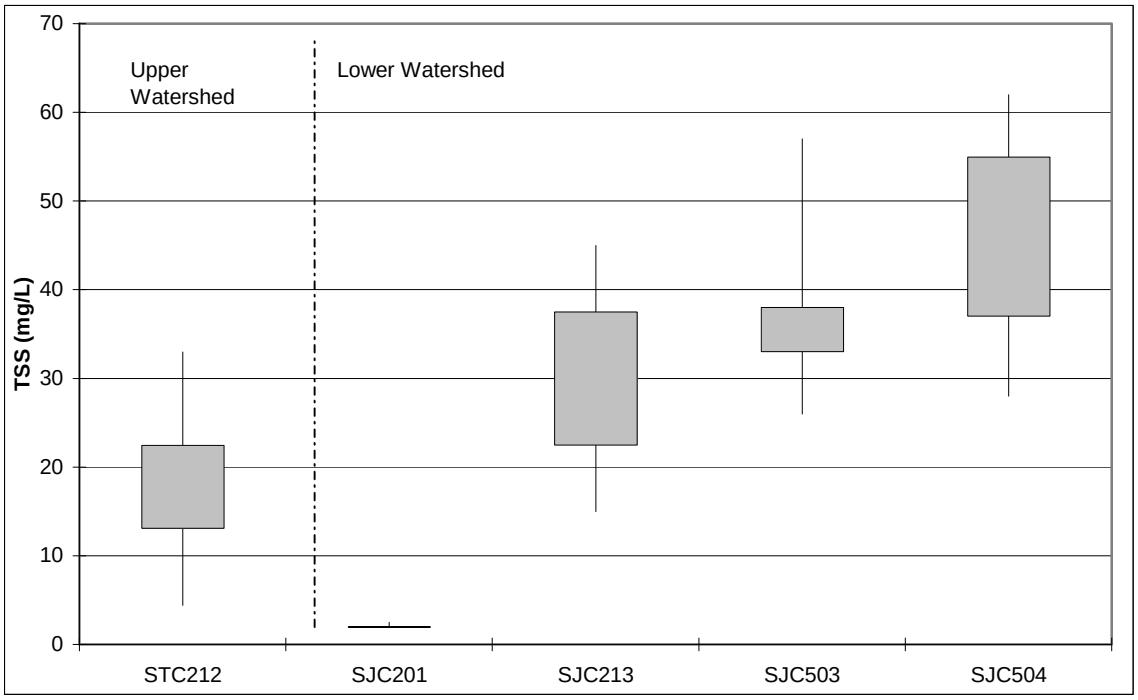


Figure F - 34 Biweekly TSS: Farmington Drainage Area, January 2003 - April 2004

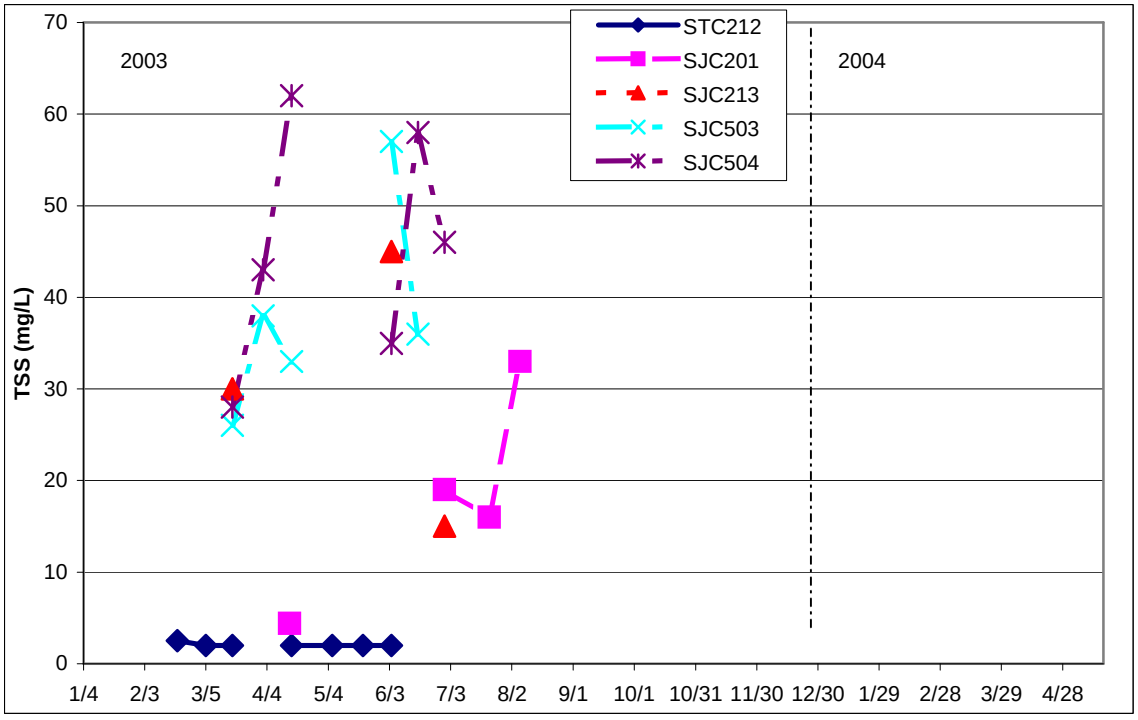


Figure F - 35 Summary TSS: Valley Floor Drainage Area, January 2003 - April 2004

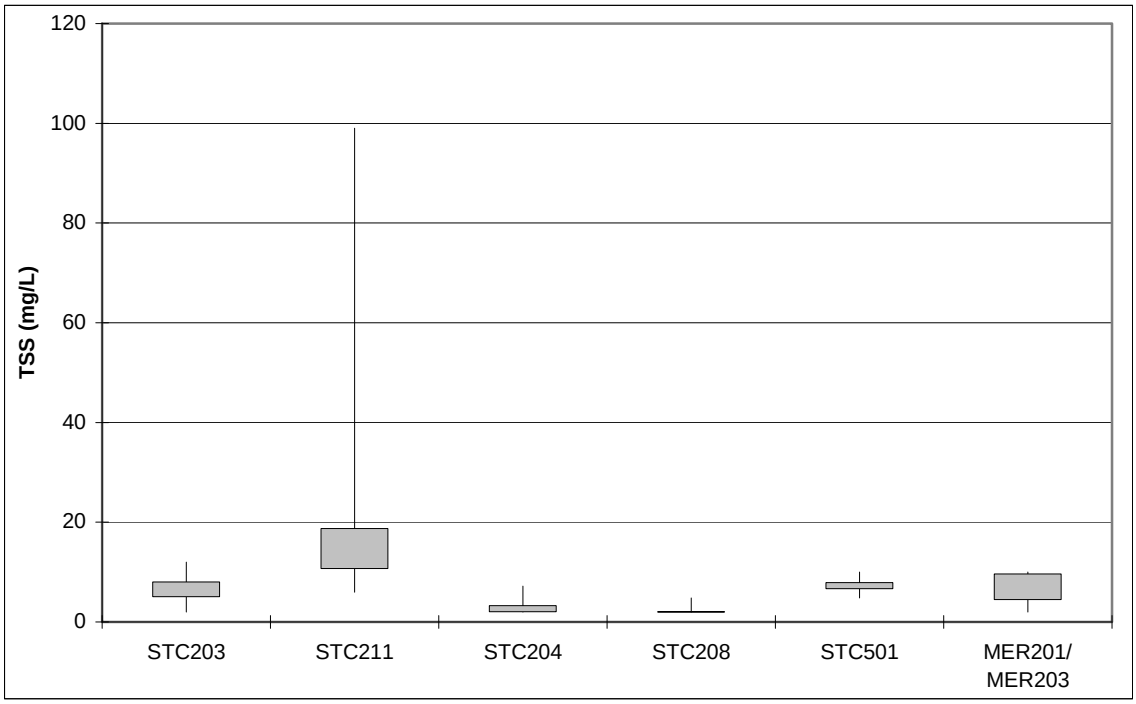


Figure F - 36Biweekly TSS: Valley Floor Drainage Area, January 2003 - April 2004

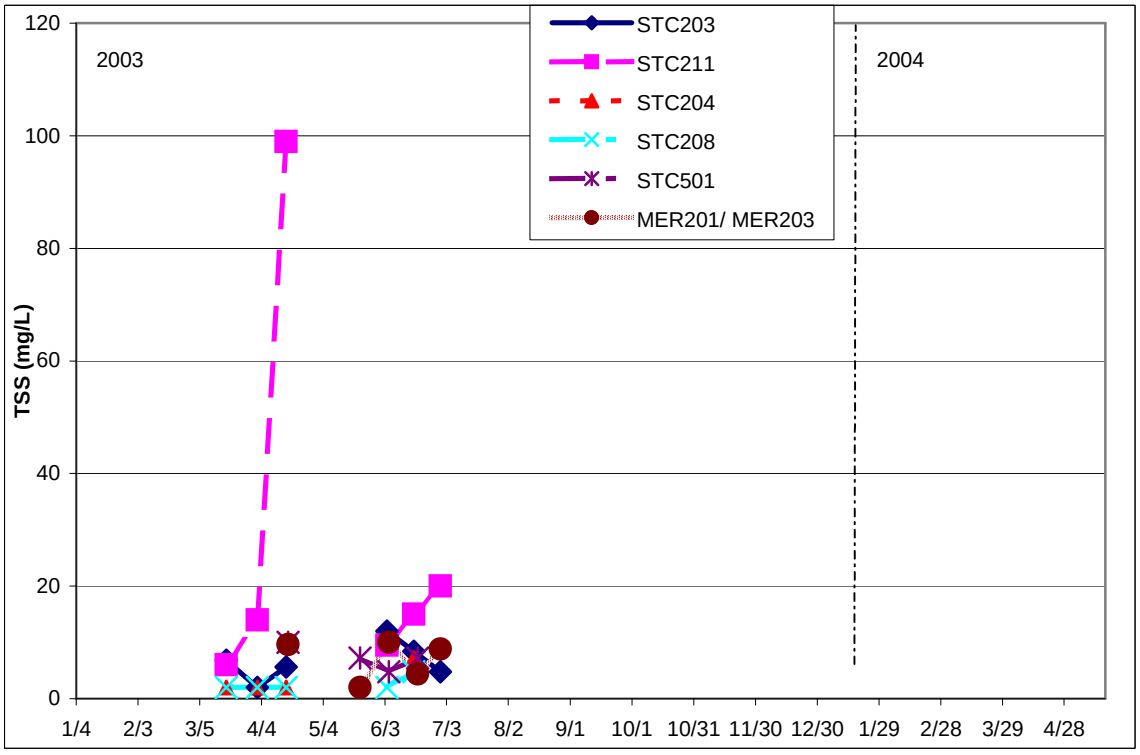


Figure F - 37Summary TSS: Stanislaus Watershed, January 2003 - April 2004

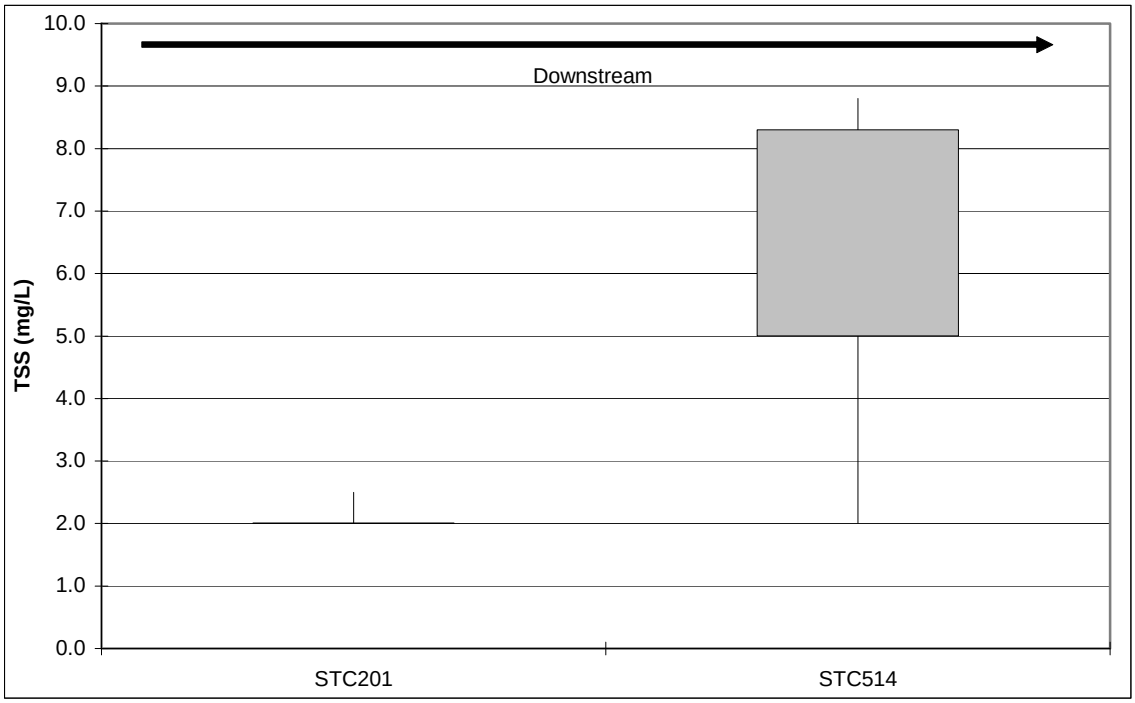


Figure F - 38Biweekly TSS: Stanislaus Watershed, January 2003 - April 2004

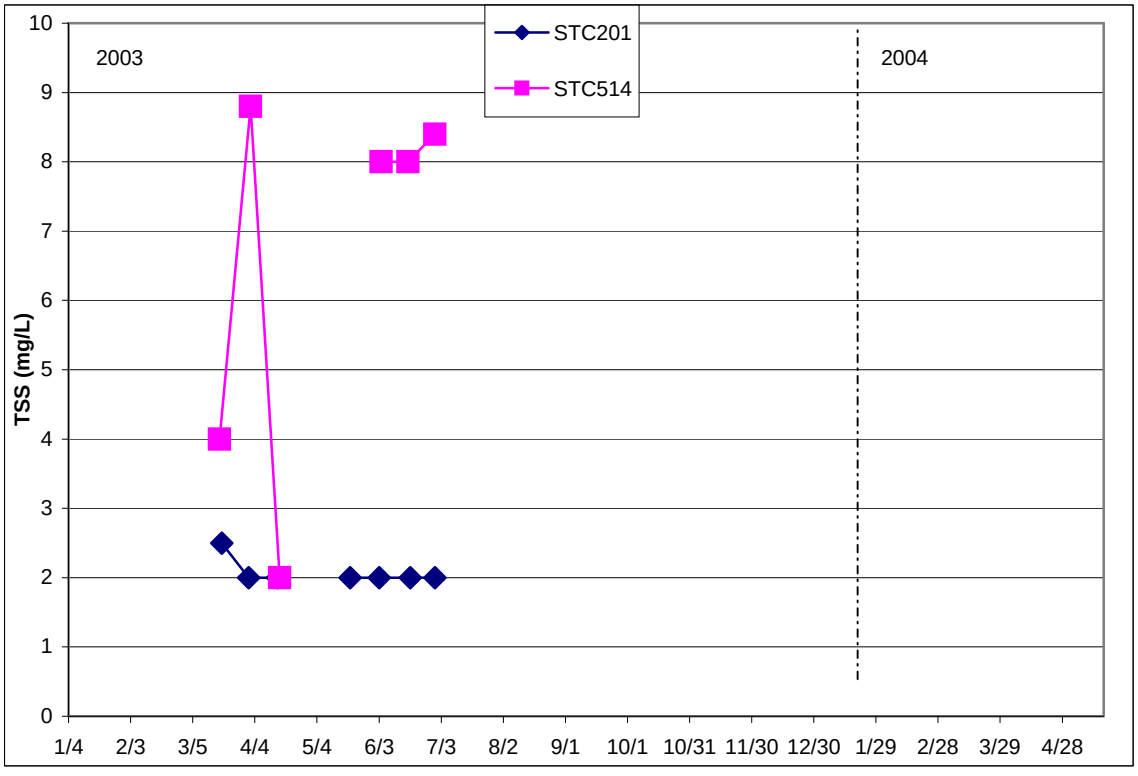


Figure F - 39 Summary TSS: Tuolumne Main Stem, January 2003 - April 2004

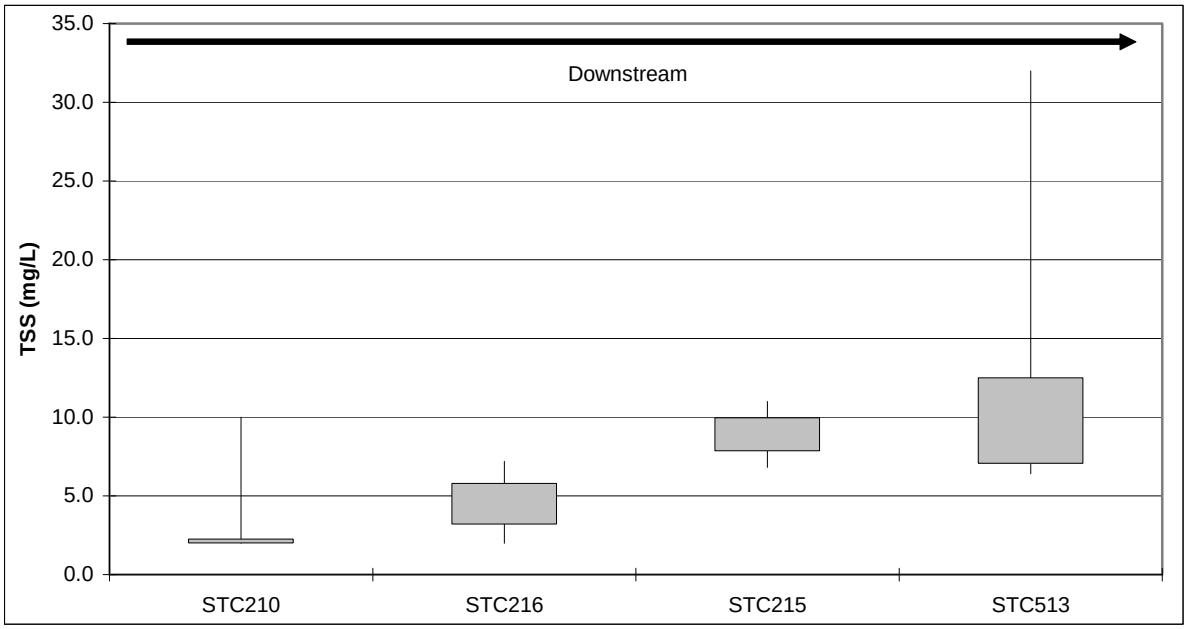


Figure F - 40 Biweekly TSS: Tuolumne Main Stem, January 2003 - April 2004

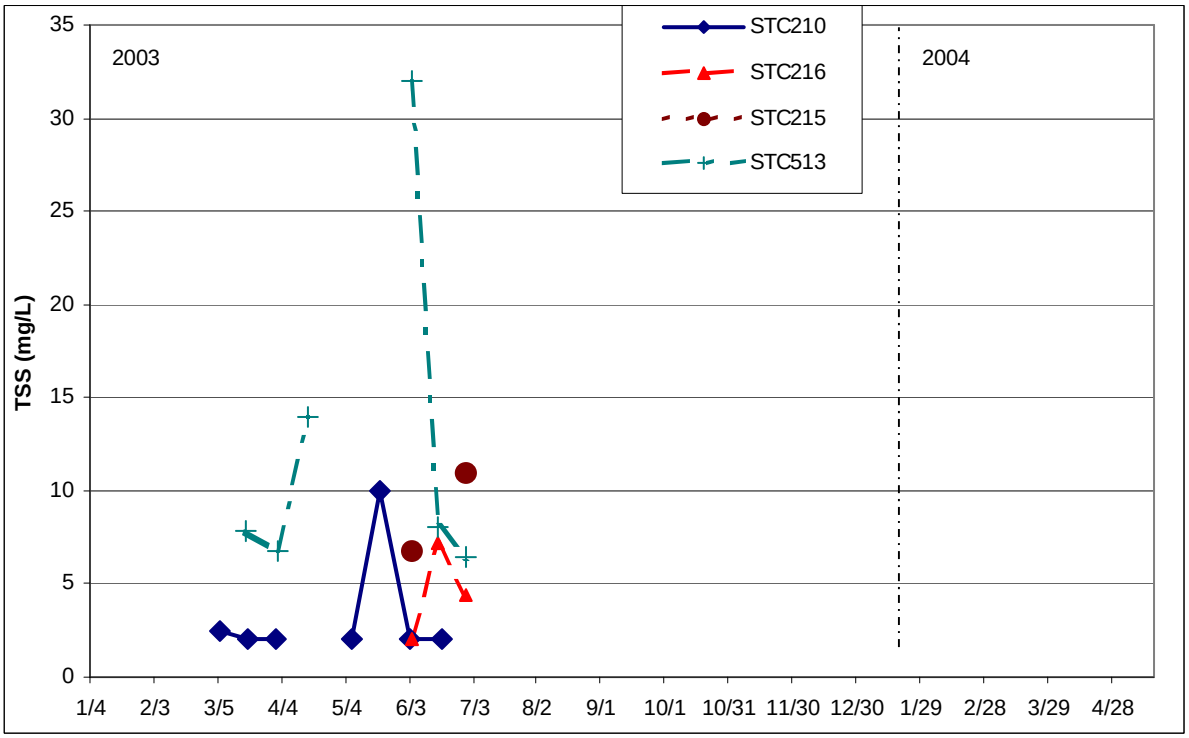


Figure F - 41 Summary TSS: Tuolumne Tributaries, January 2003 - April 2004

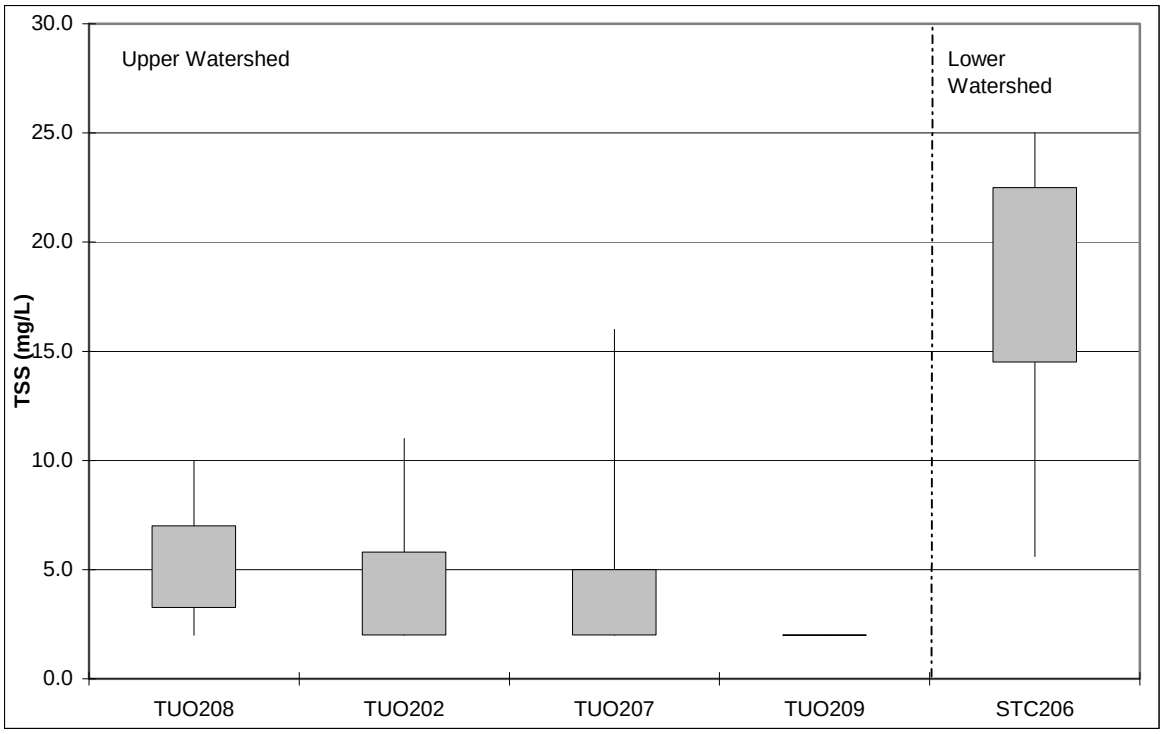


Figure F - 42 Biweekly TSS: Tuolumne Tributaries, January 2003 - April 2004

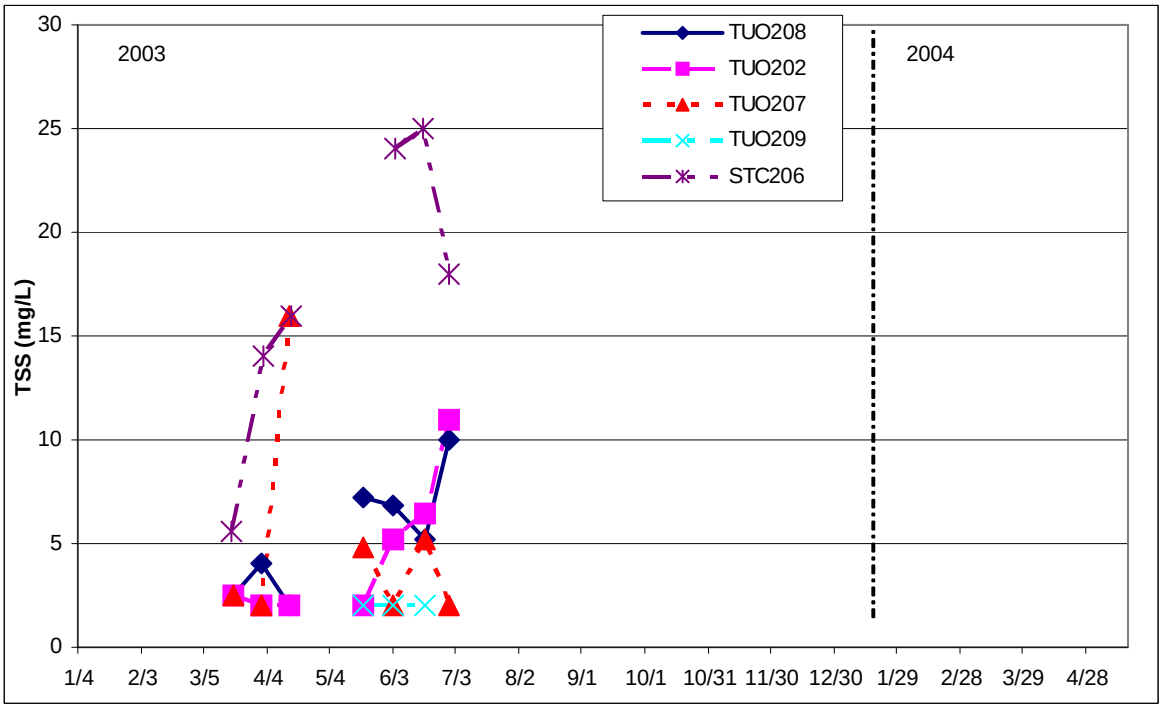


Figure F - 43 Summary TSS: Merced Watershed, January 2003 - April 2004

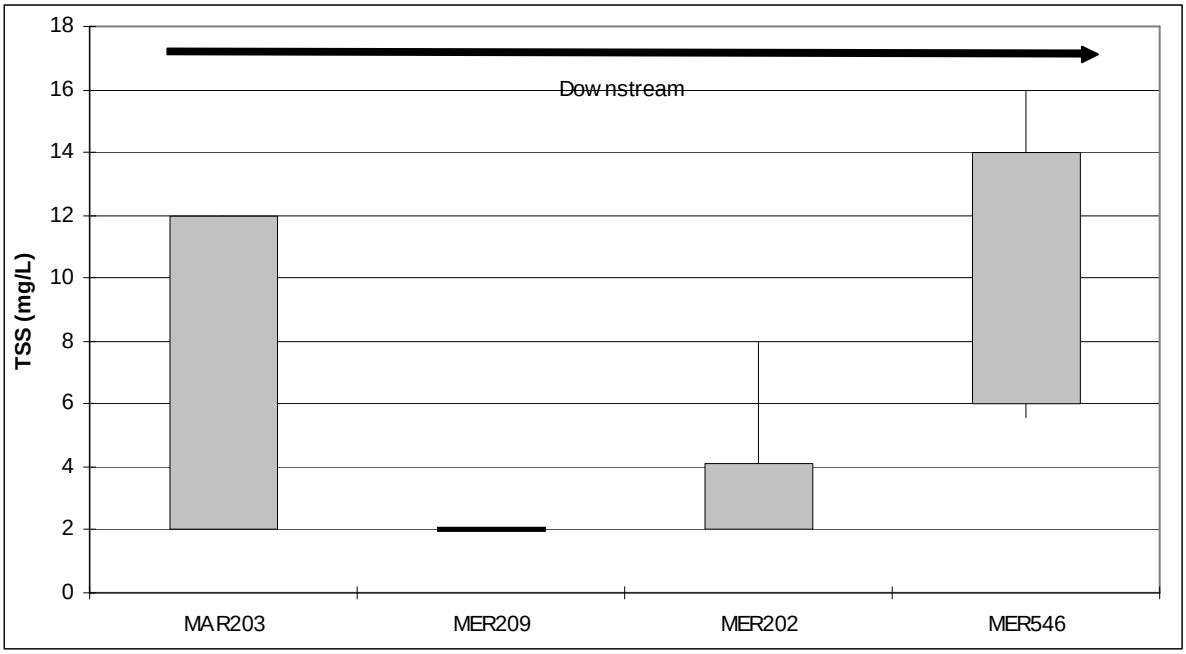
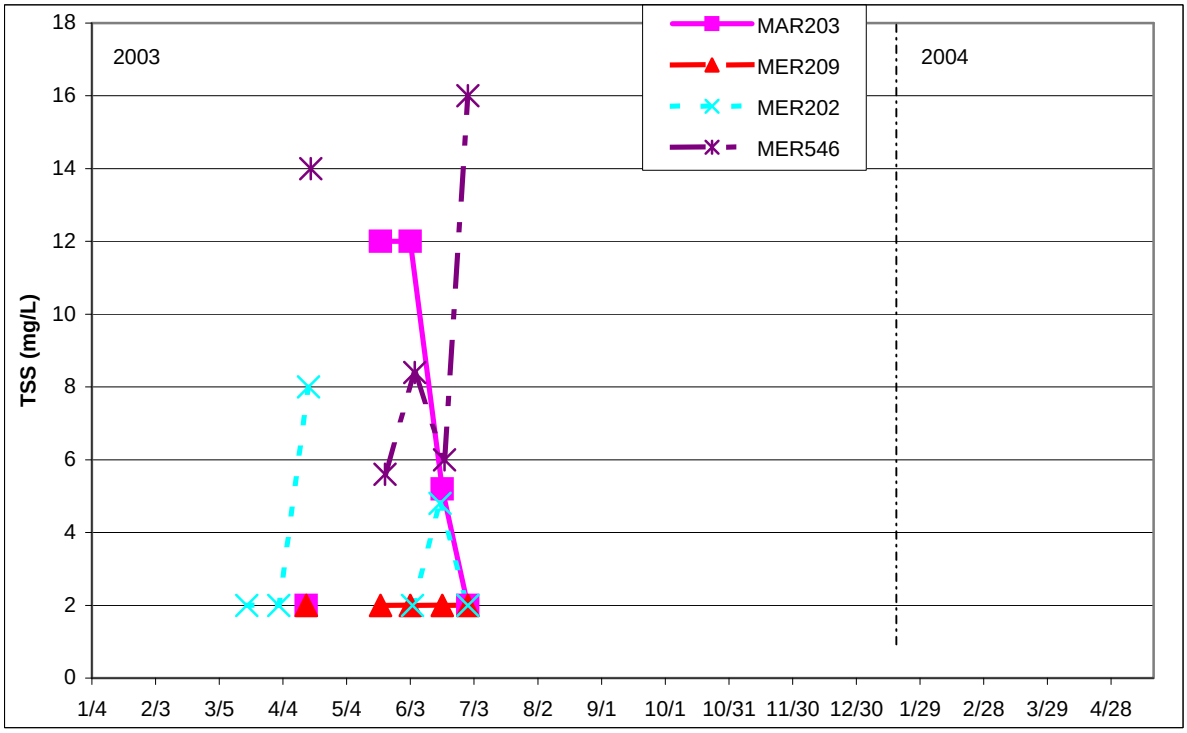


Figure F - 44 Biweekly TSS: Merced Watershed, January 2003 - April 2004



E. coli

Figure F - 45 Summary *E. coli*: Stanislaus Watershed, January 2003 - April 2004

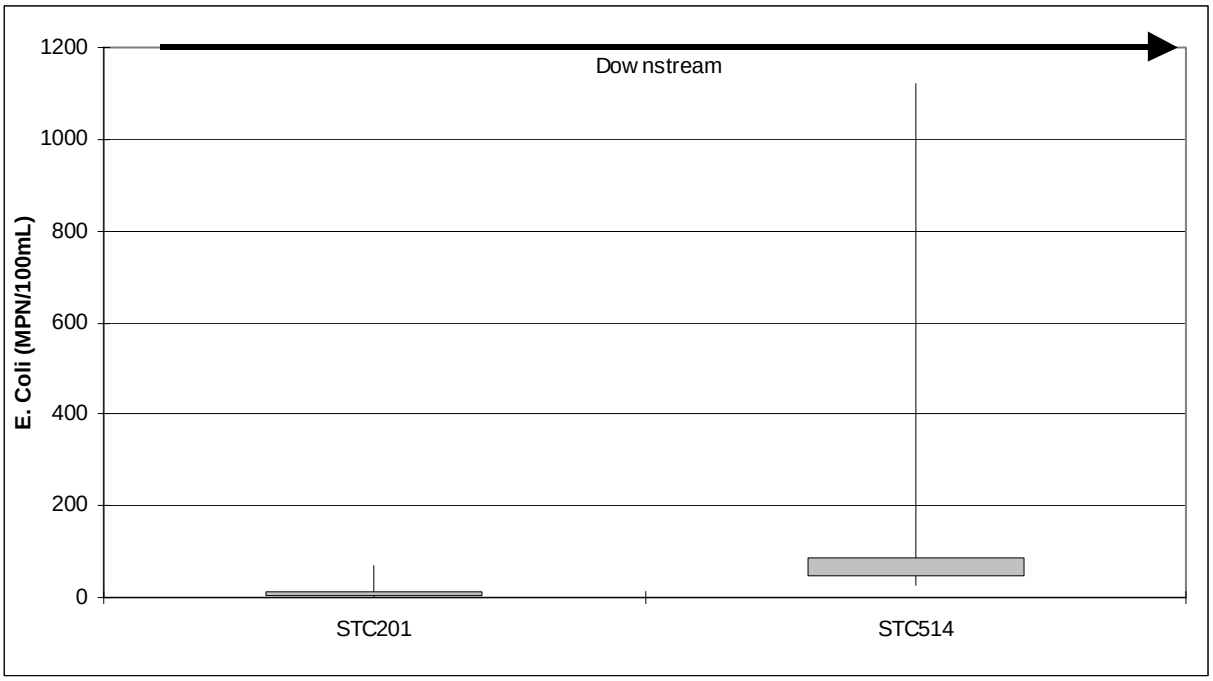


Figure F - 46Biweekly *E. coli*: Stanislaus Watershed, January 2003 - April 2004

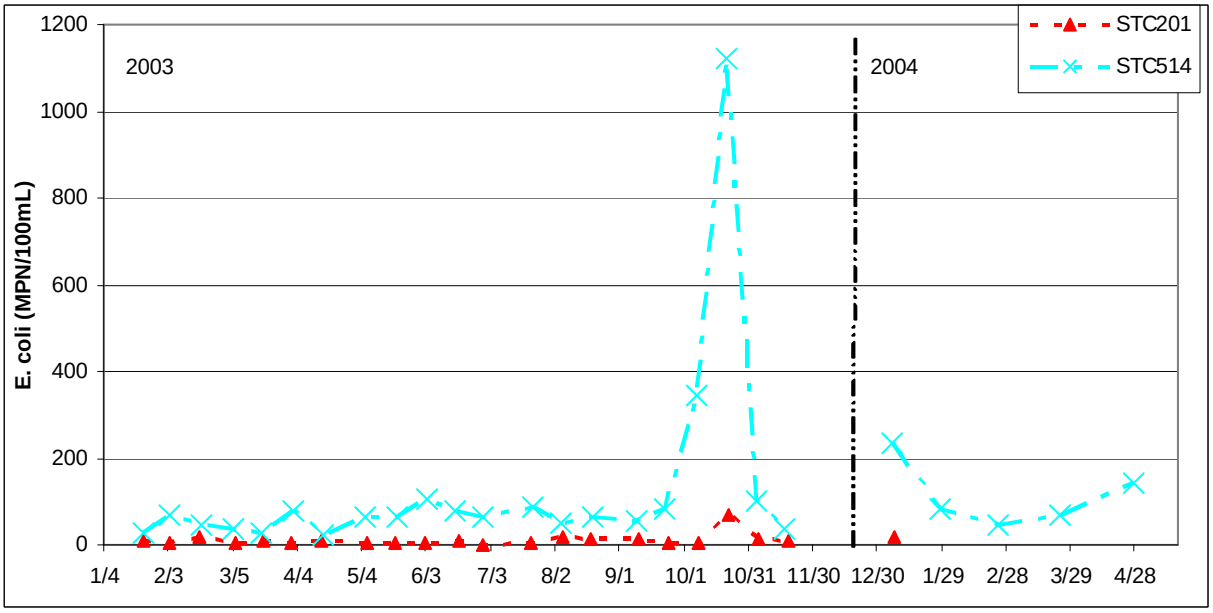


Figure F - 47 Summary *E. coli*: Merced Watershed, January 2003 - April 2004

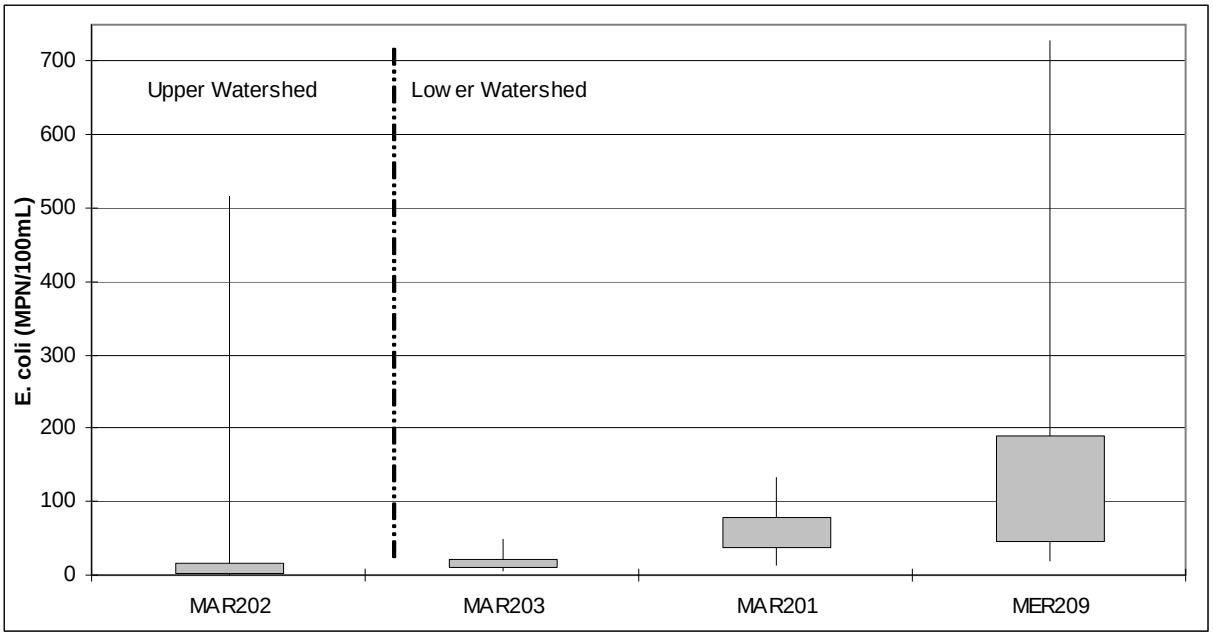
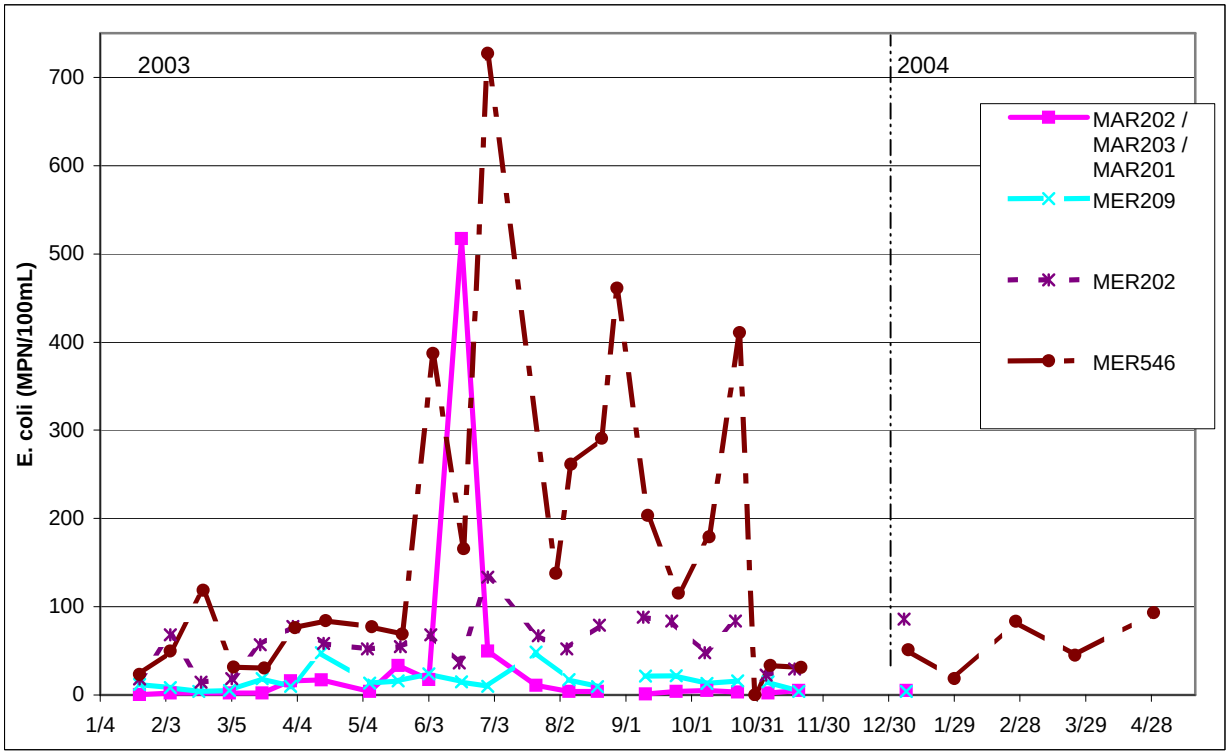


Figure F - 48 Biweekly *E. coli:* Merced Watershed, January 2003 - April 2004



Appendix G:
Special Study Data Comparisons, Section 8.3

Dry Creek Special Study Temperature

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03	12		**11**	11			4%	-1	4%	1.0	0%	0
02/04/03	12		**9**	12			0%	0	14%	3.0	14%	-3
02/19/03	13		**10**	13			0%	0	14%	3.2	14%	-3.2
03/05/03	13		**9**		13		0%	0	17%	3.7	17%	-3.7
03/18/03	15		**13**		15		0%	0	7%	2.0	7%	-2
04/02/03	16		**15**		16		0%	0	3%	1.0	3%	-1
04/16/03	No Access		**15**	13							7%	2
05/06/03	16		**16**			16	0%	0	0%	0.0	0%	0
05/21/03		21	**20**			21	0%	0	2%	1.0	2%	-1
06/04/03		24	**24**			25	2%	1	0%	0.0	2%	-1
06/17/03		25	**24**			26	2%	1	2%	1.0	4%	-2
06/30/03		23	**23**			24	2%	1	0%	0.0	2%	-1
07/23/03		26	**26**			26	0%	0	0%	0.0	0%	0
08/05/03		23	**23**			24	2%	1	0%	0.0	2%	-1
08/20/03		25	**23**			24	2%	-1	4%	2.0	2%	-1
09/09/03		21	**20**			21	0%	0	2%	1.0	2%	-1
09/22/03		21	**20**			21	0%	0	2%	1.0	2%	-1
10/07/03		19	**18**			19	0%	0	3%	1.0	3%	-1
10/21/03		16	**16**			16	0%	0	0%	0.0	0%	0
11/04/03		12	**10**			12	0%	0	9%	2.0	9%	-2
11/17/03		14	**13**			14	0%	0	4%	1.0	4%	-1
01/06/04		9	**6**			9	2%	0	22%	3.3	20%	-2.9
01/20/04		11	**10**			11	0%	0	6%	1.2	6%	-1.2
02/04/04		11	**12**			11	0%	0	4%	-1.0	4%	1
02/18/04		13	**11**			13	0%	0	8%	2.0	8%	-2
03/03/04		13	**16**			13	0%	0	10%	-3.0	10%	3
03/17/04		14				14	0%	0				
Count	**7**	**19**	**26**	**4**	**3**	**20**						
Min	**12**	**9**	**6**	**11**	**13**	**9**	0%	-1	0%	-3	0%	-4
Mean	**14**	**18**	**16**	**12**	**15**	**18**	1%	0	5%	1	6%	-1
Median	**13**	**19**	**16**	**13**	**15**	**18**	0%	0	3%	1	3%	-1
Max	**16**	**26**	**26**	**13**	**16**	**26**	2%	1	22%	4	20%	3
Q1	**13**	**13**	**11**	**12**	**14**	**13**	0%	0	2%	0	2%	-2
Q3	**16**	**23**	**20**	**13**	**16**	**24**	1%	0	8%	2	8%	0

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Dissolved Oxygen

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03	11.1		9.8	11.0			0%	0	6%	1.3	6%	-1.22
02/04/03	11.6		13.0	11.6			0%	0	6%	-1.4	6%	1.4
02/19/03	10.6		8.1	10.3			1%	0	13%	2.5	12%	-2.18
03/05/03	10.5		8.8		10.3		1%	0	9%	1.7	8%	-1.46
03/18/03	10.1		9.9		9.8		2%	0	1%	0.2	0%	0.09
04/02/03	10.3		9.4		9.6		3%	-1	4%	0.9	1%	-0.21
04/16/03	No Access		8.8	10.7							10%	-1.91
05/06/03	10.2		8.3			9.5	3%	-1	10%	1.9	7%	-1.22
05/21/03		8.9	7.5			9.1	1%	0	9%	1.4	9%	-1.52
06/04/03		9.3	7.2			8.5	4%	-1	12%	2.0	8%	-1.31
06/17/03		11.1	8.1			9.9	6%	-1	16%	3.1	10%	-1.8
06/30/03		7.8	7.2			7.5	2%	0	4%	0.6	2%	-0.3
07/23/03		8.4	7.0			7.7	4%	-1	9%	1.4	5%	-0.68
08/05/03		10.6	8.7			9.4	6%	-1	10%	1.9	4%	-0.68
08/20/03		9.0	6.0			7.3	10%	-2	20%	3.0	10%	-1.27
09/09/03		7.8	7.6			8.0	1%	0	2%	0.3	3%	-0.48
09/22/03		8.5	7.6			8.6	1%	0	5%	0.9	6%	-0.99
10/07/03		8.2	8.0			8.5	2%	0	1%	0.2	3%	-0.51
10/21/03		9.5	7.2			9.3	1%	0	14%	2.3	12%	-2.05
11/04/03		11.0	9.6			10.1	4%	-1	7%	1.5	3%	-0.55
11/17/03		11.4	8.5						15%	2.9		
01/06/04		15.7	16.0			15.7	0%	0	1%	-0.3	1%	0.3
01/20/04		11.8				11.8	0%	0				
02/04/04		14.4	12.3			14.2	1%	0	8%	2.1	7%	-1.9
02/18/04		12.9	11.7			12.3	2%	-1	5%	1.2	3%	-0.6
03/03/04		10.7	10.6			10.2	2%	-1	0%	0.1	2%	0.4
03/17/04		10.5	9.0			11.0	2%	1	8%	1.5	10%	-2
Count	**7**	**19**	**26**	**4**	**3**	**19**						
Min	**10.1**	**7.8**	**6.0**	**10.3**	**9.6**	**7.3**	0%	-2	0%	-1	0%	-2
Mean	**10.6**	**10.4**	**9.1**	**10.9**	**9.9**	**9.9**	3%	0	8%	1	6%	-1
Median	**10.5**	**10.5**	**8.6**	**10.9**	**9.8**	**9.4**	2%	0	8%	1	6%	-1
Max	**11.6**	**15.7**	**16.0**	**11.6**	**10.3**	**15.7**	10%	1	20%	3	12%	0
Q1	**10.3**	**8.7**	**7.6**	**10.6**	**9.7**	**8.5**	1%	-1	4%	1	3%	-2
Q3	**10.9**	**11.3**	**9.7**	**11.2**	**10.0**	**10.6**	3%	0	10%	2	9%	0

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study pH

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03	7.5		7.4	7.6			1%	0	1%	0.1	1%	-0.2
02/04/03	8.0		8.1	8.1			1%	0	1%	-0.1	0%	0
02/19/03	7.5		7.4	7.6			1%	0	1%	0.1	1%	-0.2
03/05/03	7.6		7.5		7.6		0%	0	1%	0.1	1%	-0.1
03/18/03	7.5		7.6		7.6		1%	0	1%	-0.1	0%	0
04/02/03	7.6		7.6		7.6		0%	0	0%	0.0	0%	0
04/16/03	No Access		7.3	7.5							1%	-0.2
05/06/03	7.5		7.3			7.4	1%	0	1%	0.2	1%	-0.1
05/21/03		7.5	7.2			7.6	1%	0	2%	0.3	3%	-0.4
06/04/03		7.8	7.6			7.6	1%	0	1%	0.2	0%	0
06/17/03		7.9	7.3			7.6	2%	0	4%	0.6	2%	-0.3
06/30/03		7.6	7.5			7.6	0%	0	1%	0.1	1%	-0.1
07/23/03		7.7	7.5			7.6	1%	0	1%	0.2	1%	-0.1
08/05/03		7.9	7.4			7.6	2%	0	3%	0.5	1%	-0.2
08/20/03		8.0	7.2			7.5	3%	-1	5%	0.8	2%	-0.3
09/09/03		7.4	7.4			7.5	1%	0	0%	0.0	1%	-0.1
09/22/03		7.5	7.4			7.6	1%	0	1%	0.1	1%	-0.2
10/07/03		7.6	7.6			7.8	1%	0	0%	0.0	1%	-0.2
10/21/03		7.3	7.5			7.4	1%	0	1%	-0.2	1%	0.1
11/04/03		7.7	7.4			7.6	1%	0	2%	0.3	1%	-0.2
11/17/03		7.6	7.3			7.6	0%	0	2%	0.3	2%	-0.3
01/06/04		7.9	7.7			8.4	3%	1	1%	0.2	4%	-0.7
01/20/04		7.9				7.8	1%	0				
02/04/04		7.7	7.7			7.8	1%	0	0%	0.0	1%	-0.1
02/18/04		7.6	7.6			7.7	1%	0	0%	0.0	1%	-0.1
03/03/04		7.9	7.9			7.8	1%	0	0%	0.0	1%	0.1
03/17/04		8.2	8.0			8.0	1%	0	1%	0.2	0%	0
Count	**7**	**19**	**26**	**4**	**3**	**20**						
Min	**7.5**	**7.3**	**7.2**	**7.5**	**7.6**	**7.4**	0%	-1	0%	0	0%	-1
Mean	**7.6**	**7.7**	**7.5**	**7.7**	**7.6**	**7.7**	1%	0	1%	0	1%	0
Median	**7.5**	**7.7**	**7.5**	**7.6**	**7.6**	**7.6**	1%	0	1%	0	1%	0
Max	**8.0**	**8.2**	**8.1**	**8.1**	**7.6**	**8.4**	3%	1	5%	1	4%	0
Q1	**7.5**	**7.6**	**7.4**	**7.6**	**7.6**	**7.6**	1%	0	1%	0	1%	0
Q3	**7.6**	**7.9**	**7.6**	**7.7**	**7.6**	**7.8**	1%	0	1%	0	1%	0

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Specific Conductance

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03	206.0		235.0	187.0			5%	-19	7%	-29.0	11%	48
02/04/03	203.0		248.0	190.0			3%	-13	10%	-45.0	13%	58
02/19/03	190.0		231.0	178.0			3%	-12	10%	-41.0	13%	53
03/05/03	188.0		369.0		176.0		3%	-12	32%	-181.0	35%	193
03/18/03	206.0		204.0		181.0		6%	-25	0%	2.0	6%	23
04/02/03	191.0		184.0		170.0		6%	-21	2%	7.0	4%	14
04/16/03	No Access		131.0	53.0							42%	78
05/06/03	87.0		127.0			103.0	8%	16	19%	-40.0	10%	24
05/21/03		133.0	122.0			174.0	13%	41	4%	11.0	18%	-52
06/04/03		121.0	115.0			146.0	9%	25	3%	6.0	12%	-31
06/17/03		133.0	113.0			161.0	10%	28	8%	20.0	18%	-48
06/30/03		90.0	104.0			126.0	17%	36	7%	-14.0	10%	-22
07/23/03		100.0	119.0			127.0	12%	27	9%	-19.0	3%	-8
08/05/03		99.0	116.0			126.0	12%	27	8%	-17.0	4%	-10
08/20/03		98.0	132.0			142.0	18%	44	15%	-34.0	4%	-10
09/09/03		115.0	110.0			137.0	9%	22	2%	5.0	11%	-27
09/22/03		108.0	116.0			140.0	13%	32	4%	-8.0	9%	-24
10/07/03		118.0	98.0			149.0	12%	31	9%	20.0	21%	-51
10/21/03		75.0	139.0			92.0	10%	17	30%	-64.0	20%	47
11/04/03		118.0	114.0			145.0	10%	27	2%	4.0	12%	-31
11/17/03		134.0	138.0			167.0	11%	33	1%	-4.0	10%	-29
01/06/04		156.0	214.0			175.0	6%	19	16%	-58.0	10%	39
01/20/04		153.0				179.0	8%	26				
02/04/04		146.0	119.0			170.0	8%	24	10%	27.0	18%	-51
02/18/04		143.0	99.0			140.0	1%	-3	18%	44.0	17%	-41
03/03/04		161.0	164.0			183.0	6%	22	1%	-3.0	5%	-19
03/17/04		59.0	222.0			65.0	5%	6	58%	-163.0	55%	157
Count	**7**	**19**	**26**	**4**	**3**	**20**						
Min	**87.0**	**59.0**	**98.0**	**53.0**	**170.0**	**65.0**	1%	-25	0%	-181	3%	-52
Mean	**181.6**	**118.9**	**157.0**	**152.0**	**175.7**	**142.4**	9%	18	12%	-22	15%	7
Median	**191.0**	**118.0**	**129.0**	**182.5**	**176.0**	**143.5**	9%	25	8%	-4	11%	-15
Max	**206.0**	**161.0**	**369.0**	**190.0**	**181.0**	**183.0**	18%	44	58%	44	55%	193
Q1	**189.0**	**99.5**	**115.3**	**146.8**	**173.0**	**126.8**	6%	-1	3%	-40	9%	-31
Q3	**204.5**	**138.5**	**199.0**	**187.8**	**178.5**	**167.8**	11%	28	15%	6	18%	45

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Turbidity

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03	2.7		9.0	4.2			22%	2	54%	-6.3	36%	4.8
02/04/03	3.2		3.7	2.8			7%	0	7%	-0.5	14%	0.9
02/19/03	3.3		1.8	4.6			16%	1	29%	1.5	44%	-2.8
03/05/03	1.6		1.2		4.8		50%	3	14%	0.4	60%	-3.6
03/18/03	3.0		19.2		5.8		32%	3	73%	-16.2	54%	13.4
04/02/03	2.3		20.8		6.7		49%	4	80%	-18.5	51%	14.1
04/16/03	No Access		25.7	12.0							36%	13.7
05/06/03	3.3		17.9			6.6	33%	3	69%	-14.6	46%	11.3
05/21/03		7.0	33.3			4.6	21%	-2	65%	-26.3	76%	28.7
06/04/03		3.1	36.2			6.5	35%	3	84%	-33.1	70%	29.7
06/17/03		9.3	34.4			6.8	16%	-3	57%	-25.1	67%	27.6
06/30/03		12.4	24.2			9.3	14%	-3	32%	-11.8	44%	14.9
07/23/03		2.3	10.1			6.2	46%	4	63%	-7.8	24%	3.9
08/05/03		2.5	23.6			6.3	43%	4	81%	-21.1	58%	17.3
08/20/03		28.9	17.1			9.2	52%	-20	26%	11.8	30%	7.9
09/09/03		45.0	26.4			8.4	69%	-37	26%	18.6	52%	18
09/22/03		3.3	19.9			13.9	62%	11	72%	-16.6	18%	6
10/07/03		2.1	7.7			2.1	0%	0	57%	-5.6	57%	5.6
10/21/03		3.1	6.8			4.0	13%	1	37%	-3.7	26%	2.8
11/04/03		2.6	18.2			2.8	4%	0	75%	-15.6	73%	15.4
11/17/03		2.1	7.0			1.7	11%	0	54%	-4.9	61%	5.3
01/06/04		3.0	53.6			12.6	62%	10	89%	-50.6	62%	41
01/20/04		2.6				12.3	65%	10				
02/04/04		5.5	25.0			7.9	18%	2	64%	-19.5	52%	17.1
02/18/04		4.3	22.0			15.6	57%	11	67%	-17.7	17%	6.4
03/03/04												
03/17/04		5.0	4.3			8.3	25%	3	8%	0.7	32%	-4
Count	**7**	**18**	**25**	**4**	**3**	**19**						
Min	**1.6**	**2.1**	**1.2**	**2.8**	**4.8**	**1.7**	0%	-37	7%	-51	14%	-4
Mean	**2.8**	**8.0**	**18.8**	**5.9**	**5.8**	**7.6**	34%	0	56%	-13	48%	13
Median	**3.0**	**3.2**	**19.2**	**4.4**	**5.8**	**6.8**	33%	3	63%	-15	52%	13
Max	**3.3**	**45.0**	**53.6**	**12.0**	**6.7**	**15.6**	69%	11	89%	19	76%	41
Q1	**2.5**	**2.6**	**7.7**	**3.9**	**5.3**	**5.4**	16%	0	32%	-19	32%	5
Q3	**3.3**	**6.6**	**25.0**	**6.5**	**6.3**	**9.3**	50%	4	72%	-3	60%	17

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Total Suspended Solids

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03												
02/04/03												
02/19/03												
03/05/03												
03/18/03	<4.0		5.6		6.0		NA	6.0	NA	NA	3%	-0.4
04/02/03	<4.0		14.0		6.0		NA	6.0	NA	NA	40%	8.0
04/16/03			16.0	20.0							11%	-4.0
05/06/03												
05/21/03												
06/04/03		<4.0	24.0			6.8	NA	6.8	NA	NA	56%	17.2
06/17/03		7.2	24.0						54%	-16.8		
06/30/03		4.4	18.0			11.0	43%	6.6	61%	-13.6	24%	7.0
07/23/03												
08/05/03												
08/20/03												
09/09/03												
09/22/03												
10/07/03												
10/21/03												
11/04/03												
11/17/03												
01/06/04												
01/20/04												
02/04/04												
02/18/04												
03/03/04												
03/17/04												
Count	**2**	**3**	**6**	**1**	**2**	**2**						
Min	**<4.0**	**<4.0**	**5.6**	**20.0**	**6.0**	**6.8**	NA	NA	NA	NA	3%	-4
Mean		**4.5**	**16.9**				NA	NA	NA	NA	27%	6
Median		**4.4**	**17.0**				NA	NA	NA	NA	24%	7
Max	**<4.0**	**7.2**	**24.0**		**6.0**	**11.0**	NA	NA	NA	NA	56%	17
Q1	**<4.0**	**3.2**	**14.5**		**6.0**	**7.9**	NA	NA	NA	NA	11%	0
Q3	**<4.0**	**5.8**	**22.5**		**6.0**	**10.0**	NA	NA	NA	NA	40%	8

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Total Organic Carbon

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03												
02/04/03												
02/19/03												
03/05/03												
03/18/03												
04/02/03	1.4		5.4		2.1		20%	0.7	59%	-4.0	44%	3.3
04/16/03			8.4	2.6							53%	5.8
05/06/03	2.1		6.9						53%	-4.8		
05/21/03		2.1	7.3			2.5	9%	0.4	55%	-5.2	49%	4.8
06/04/03		2.4	11.0			3.4	17%	1.0	64%	-8.6	53%	7.6
06/17/03		1.7	7.4			2.9	26%	1.2	63%	-5.7	44%	4.5
06/30/03		2.2	7.9			2.9	14%	0.7	56%	-5.7	46%	5.0
07/23/03												
08/05/03												
08/20/03												
09/09/03												
09/22/03												
10/07/03												
10/21/03												
11/04/03												
11/17/03												
01/06/04												
01/20/04												
02/04/04												
02/18/04												
03/03/04												
03/17/04												
Count	**2**	**4**	**7**	**1**	**1**	**4**						
Min	**1.4**	**1.7**	**5.4**	**2.6**	**2.1**	**2.5**	9%	0	53%	-9	44%	3
Mean		**2.1**	**7.8**			**2.9**	17%	1	58%	-6	48%	5
Median		**2.2**	**7.4**			**2.9**	17%	1	58%	-5	48%	5
Max	**2.1**	**2.4**	**11.0**			**3.4**	26%	1	64%	-4	53%	8
Q1	**1.6**	**2.0**	**7.1**			**2.8**	14%	1	56%	-6	45%	5
Q3	**1.9**	**2.3**	**8.2**			**3.0**	20%	1	62%	-5	52%	6

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Total Coliform

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03	921		2420	770			9%	-151	45%	-1499.0	52%	1650
02/04/03	461		1986	397			7%	-64	62%	-1525.0	67%	1589
02/19/03	980		816	1203			10%	223	9%	164.0	19%	-387
03/05/03	313		>2420		328		2%	15	NA	NA	NA	NA
03/18/03	1414		>2420		2420		26%	1006	NA	NA	NA	NA
04/02/03	>2420		>2420		>2420		NA	NA	NA	NA	NA	NA
04/16/03	No Access		>2420	>2420							NA	NA
05/06/03	2420		>2420			2420	NA	NA	NA	NA	NA	NA
05/21/03		>2420	>2420			>2420	NA	NA	NA	NA	NA	NA
06/04/03		2420	>2420			>2420	NA	NA	NA	NA	NA	NA
06/17/03		2420	>2420			>2420	NA	NA	NA	NA	NA	NA
06/30/03		>2420	>2420			>2420	NA	NA	NA	NA	NA	NA
07/23/03		>2420	>2420			>2420	NA	NA	NA	NA	NA	NA
08/05/03		>2420	>2420			>2420	NA	NA	NA	NA	NA	NA
08/20/03		>2420	>2420			>2420	NA	NA	NA	NA	NA	NA
09/09/03		>2420	>2420			>2420	NA	NA	NA	NA	NA	NA
09/22/03		>2420	>2420			>2420	NA	NA	NA	NA	NA	NA
10/07/03		>2420	>2420			>2420	NA	NA	NA	NA	NA	NA
10/21/03		>2420	>2420			>2420	NA	NA	NA	NA	NA	NA
11/04/03		>2420	>2420			>2420	NA	NA	NA	NA	NA	NA
11/17/03		2420	>2420			>2420	NA	NA	NA	NA	NA	NA
01/06/04		866	>2420			1414	24%	548	NA	NA	NA	NA
01/20/04		>2420				1120	NA	NA				
02/04/04		1120	>2420			>2420	NA	NA	NA	NA	NA	NA
02/18/04		>2420	>2420			>2420	NA	NA	NA	NA	NA	NA
03/03/04		345	>2420			>2420	NA	-345	NA	NA	NA	NA
03/17/04		1733	1046			649	46%	-1084	25%	687.0	23%	397
Count	**7**	**19**	**26**	**4**	**3**	**20**						
Min	**313**	**345**	**816**	**397**	**328**	**649**	2%	-1084	9%	-1525	19%	-387
Mean	**1287**	**2175**	**2356**	**1218**	**1749**	**2280**	NA	NA	NA	NA	NA	NA
Median	**980**	**>2420**	**>2420**	**987**	**2420**	**>2420**	NA	NA	NA	NA	NA	NA
Max	**>2420**	**>2420**	**>2420**	**>2420**	**>2420**	**>2420**	NA	NA	NA	NA	NA	NA
Q1	**691**	**2420**	**2500**	**677**	**1374**	**2500**	NA	NA	NA	NA	NA	NA
Q3	**1917**	**2500**	**2500**	**1527**	**2460**	**2500**	NA	NA	NA	NA	NA	NA

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study ***E. coli***

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03	23		192	42			29%	19	79%	-169	64%	150
02/04/03	12		61	16			14%	4	67%	-49	58%	45
02/19/03	25		39	29			7%	4	22%	-14	15%	10
03/05/03	20		71		29		18%	9	56%	-51	42%	42
03/18/03	24		579		63		45%	39	92%	-555	80%	516
04/02/03	65		1120		613		81%	548	89%	-1055	29%	507
04/16/03	No Access		196	133							19%	63
05/06/03	118		133			60	33%	-58	6%	-15	38%	73
05/21/03		147	228			133	5%	-14	22%	-81	26%	95
06/04/03		39	152			104	45%	65	59%	-113	19%	48
06/17/03		39	144			102	45%	63	57%	-105	17%	42
06/30/03		96	261			205	36%	109	46%	-165	12%	56
07/23/03		51	119			130	44%	79	40%	-68	4%	-11
08/05/03		613	248			172	56%	-441	42%	365	18%	76
08/20/03		16	921			613	95%	597	97%	-905	20%	308
09/09/03		122	291			74	24%	-48	41%	-169	59%	217
09/22/03		59	88			50	8%	-9	20%	-29	28%	38
10/07/03		133	115			64	35%	-69	7%	18	28%	51
10/21/03		55	435			83	20%	28	78%	-380	68%	352
11/04/03		23	>2420			88	59%	65	NA	NA	NA	NA
11/17/03		37	50			38	1%	1	15%	-13	14%	12
01/06/04		11	>2420			186	89%	175	NA	NA	NA	NA
01/20/04		26				43	25%	17				
02/04/04		22	921			56	44%	34	95%	-899	89%	865
02/18/04		75	1300			461	72%	386	89%	-1225	48%	839
03/03/04		23	1733			240	83%	217	97%	-1710	76%	1493
03/17/04		36	68			27	14%	-9	31%	-32	43%	41
Count	**7**	**19**	**26**	**4**	**3**	**20**						
Min	**12**	**11**	**39**	**16**	**29**	**27**	1%	-441	6%	-1710	4%	-11
Mean	**41**	**85**	**556**	**55**	**235**	**146**	41%	75	52%	-343	36%	261
Median	**24**	**39**	**212**	**36**	**63**	**95**	40%	31	46%	-105	28%	68
Max	**118**	**613**	**>2420**	**133**	**613**	**613**	95%	597	97%	365	89%	1493
Q1	**22**	**25**	**116**	**26**	**46**	**59**	19%	-7	26%	-468	19%	42
Q3	**45**	**86**	**836**	**65**	**338**	**176**	53%	76	84%	-31	59%	319

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Boron

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03												
02/04/03												
02/19/03												
03/05/03												
03/18/03	<0.05		<0.05		<0.05		NA	NA	NA	NA	NA	NA
04/02/03												
04/16/03			<0.05	<0.05							NA	NA
05/06/03												
05/21/03		<0.05	<0.05			<0.05	NA	NA	NA	NA	NA	NA
06/04/03												
06/17/03		<0.05	<0.05			<0.05	NA	NA	NA	NA	NA	NA
06/30/03		<0.05	<0.05			<0.05	NA	NA	NA	NA	NA	NA
07/23/03												
08/05/03												
08/20/03												
09/09/03												
09/22/03												
10/07/03												
10/21/03												
11/04/03												
11/17/03												
01/06/04												
01/20/04												
02/04/04												
02/18/04												
03/03/04												
03/17/04												
Count	**1**	**3**	**5**	**1**	**1**	**3**						
Min	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	NA	NA	NA	NA	NA	NA
Mean		**<0.05**	**<0.05**			**<0.05**	NA	NA	NA	NA	NA	NA
Median		**<0.05**	**<0.05**			**<0.05**	NA	NA	NA	NA	NA	NA
Max		**<0.05**	**<0.05**			**<0.05**	NA	NA	NA	NA	NA	NA
Q1		**<0.05**	**<0.05**			**<0.05**	NA	NA	NA	NA	NA	NA
Q3		**<0.05**	**<0.05**			**<0.05**	NA	NA	NA	NA	NA	NA

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Calcium

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03												
02/04/03												
02/19/03												
03/05/03												
03/18/03	14.0		15.0		14.0		0%	0	3%	-1.0	3%	1
04/02/03												
04/16/03			9.5	4.5							36%	5
05/06/03												
05/21/03		10.0	8.8			13.0	13%	3	6%	1.2	19%	-4.2
06/04/03												
06/17/03		10.0	9.0			12.0	9%	2	5%	1.0	14%	-3
06/30/03		6.9	8.4			9.8	17%	3	10%	-1.5	8%	-1.4
07/23/03												
08/05/03												
08/20/03												
09/09/03												
09/22/03												
10/07/03												
10/21/03												
11/04/03												
11/17/03												
01/06/04												
01/20/04												
02/04/04												
02/18/04												
03/03/04												
03/17/04												
Count	**1**	**3**	**5**	**1**	**1**	**3**						
Min	**14.0**	**6.9**	**8.4**	**4.5**	**14.0**	**9.8**	0%	0	3%	-2	3%	-4
Mean		**9.0**	**10.1**			**11.6**	10%	2	6%	0	16%	-1
Median		**10.0**	**9.0**			**12.0**	11%	2	6%	0	14%	-1
Max		**10.0**	**15.0**			**13.0**	17%	3	10%	1	36%	5
Q1		**8.5**	**8.8**			**10.9**	7%	2	5%	-1	8%	-3
Q3		**10.0**	**9.5**			**12.5**	14%	3	7%	1	19%	1

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Magnesium

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03												
02/04/03												
02/19/03												
03/05/03												
03/18/03	6.2		7.9		6.2		0%	0	12%	-1.7	12%	1.7
04/02/03												
04/16/03			4.6	2.0							39%	2.6
05/06/03												
05/21/03		4.7	4.6			5.8	10%	1	1%	0.1	12%	-1.2
06/04/03												
06/17/03		4.5	4.4			5.3	8%	1	1%	0.1	9%	-0.9
06/30/03		3.1	4.0			4.2	15%	1	13%	-0.9	2%	-0.2
07/23/03												
08/05/03												
08/20/03												
09/09/03												
09/22/03												
10/07/03												
10/21/03												
11/04/03												
11/17/03												
01/06/04												
01/20/04												
02/04/04												
02/18/04												
03/03/04												
03/17/04												
Count	**1**	**3**	**5**	**1**	**1**	**3**						
Min	**6.2**	**3.1**	**4.0**	**2.0**	**6.2**	**4.2**	0%	0	1%	-2	2%	-1
Mean		**4.1**	**5.1**			**5.1**	8%	1	7%	-1	15%	0
Median		**4.5**	**4.6**			**5.3**	9%	1	7%	0	12%	0
Max		**4.7**	**7.9**			**5.8**	15%	1	13%	0	39%	3
Q1		**3.8**	**4.4**			**4.8**	6%	1	1%	-1	9%	-1
Q3		**4.6**	**4.6**			**5.6**	12%	1	12%	0	12%	2

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Chloride

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03												
02/04/03												
02/19/03												
03/05/03												
03/18/03	15.0		11.0		13.0		7%	-2	15%	4.0	8%	-2
04/02/03												
04/16/03			7.1	3.6							33%	3.5
05/06/03												
05/21/03		8.2	5.2			11.0	15%	3	22%	3.0	36%	-5.8
06/04/03												
06/17/03		8.7	4.4			10.0	7%	1	33%	4.3	39%	-5.6
06/30/03		5.6	4.2			7.9	17%	2	14%	1.4	31%	-3.7
07/23/03												
08/05/03												
08/20/03												
09/09/03												
09/22/03												
10/07/03												
10/21/03												
11/04/03												
11/17/03												
01/06/04												
01/20/04												
02/04/04												
02/18/04												
03/03/04												
03/17/04												
Count	**1**	**3**	**5**	**1**	**1**	**3**						
Min	**15.0**	**5.6**	**4.2**	**3.6**	**13.0**	**7.9**	7%	-2	14%	1	8%	-6
Mean		**7.5**	**6.4**			**9.6**	11%	1	21%	3	29%	-3
Median		**8.2**	**5.2**			**10.0**	11%	2	19%	4	33%	-4
Max		**8.7**	**11.0**			**11.0**	17%	3	33%	4	39%	4
Q1		**6.9**	**4.4**			**9.0**	7%	0	15%	3	31%	-6
Q3		**8.5**	**7.1**			**10.5**	15%	2	25%	4	36%	-2

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Sulfate

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03												
02/04/03												
02/19/03												
03/05/03												
03/18/03	7.0		8.0		7.0		0%	0	7%	-1.0	7%	1
04/02/03												
04/16/03			3.7	2.5							19%	1.2
05/06/03												
05/21/03		5.7	3.9			6.9	10%	1	19%	1.8	28%	-3
06/04/03												
06/17/03		5.7	3.5			6.3	5%	1	24%	2.2	29%	-2.8
06/30/03		3.8	3.3			4.9	13%	1	7%	0.5	20%	-1.6
07/23/03												
08/05/03												
08/20/03												
09/09/03												
09/22/03												
10/07/03												
10/21/03												
11/04/03												
11/17/03												
01/06/04												
01/20/04												
02/04/04												
02/18/04												
03/03/04												
03/17/04												
Count	**1**	**3**	**5**	**1**	**1**	**3**						
Min	**7.0**	**3.8**	**3.3**	**2.5**	**7.0**	**4.9**	0%	0	7%	-1	7%	-3
Mean		**5.1**	**4.5**			**6.0**	7%	1	14%	1	20%	-1
Median		**5.7**	**3.7**			**6.3**	7%	1	13%	1	20%	-2
Max		**5.7**	**8.0**			**6.9**	13%	1	24%	2	29%	1
Q1		**4.8**	**3.5**			**5.6**	4%	0	7%	0	19%	-3
Q3		**5.7**	**3.9**			**6.6**	10%	1	20%	2	28%	1

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Hardness

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03												
02/04/03												
02/19/03												
03/05/03												
03/18/03	61		69		59		2%	-2	6%	-8.0	8%	10
04/02/03												
04/16/03			43	20							37%	23
05/06/03												
05/21/03		45	41			57	12%	12	5%	4.0	16%	-16
06/04/03												
06/17/03		44	41			53	9%	9	4%	3.0	13%	-12
06/30/03		30	38			42	17%	12	12%	-8.0	5%	-4
07/23/03												
08/05/03												
08/20/03												
09/09/03												
09/22/03												
10/07/03												
10/21/03												
11/04/03												
11/17/03												
01/06/04												
01/20/04												
02/04/04												
02/18/04												
03/03/04												
03/17/04												
Count	**1**	**3**	**5**	**1**	**1**	**3**						
Min	**61**	**30**	**38**	**20**	**59**	**42**	2%	-2	4%	-8	5%	-16
Mean		**40**	**46**			**51**	10%	8	7%	-2	16%	0
Median		**44**	**41**			**53**	11%	11	5%	-3	13%	-4
Max		**45**	**69**			**57**	17%	12	12%	4	37%	23
Q1		**37**	**41**			**48**	7%	6	4%	-8	8%	-12
Q3		**45**	**43**			**55**	13%	12	8%	3	16%	10

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Copper

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03												
02/04/03												
02/19/03												
03/05/03												
03/18/03	1.1		3.4		1.8		24%	1	51%	-2.3	31%	1.6
04/02/03												
04/16/03			5.2	1.8							49%	3.4
05/06/03												
05/21/03		2.1	5.0			1.3	24%	-1	41%	-2.9	59%	3.7
06/04/03												
06/17/03		<1.0	5.1			1.1	NA	NA	NA	NA	65%	4
06/30/03		<1.0	3.1			1.6	NA	NA	NA	NA	32%	1.5
07/23/03												
08/05/03												
08/20/03												
09/09/03												
09/22/03												
10/07/03												
10/21/03												
11/04/03												
11/17/03												
01/06/04												
01/20/04												
02/04/04												
02/18/04												
03/03/04												
03/17/04												
Count	**1**	**3**	**5**	**1**	**1**	**3**						
Min	**1.1**	**<1.0**	**3.1**	**1.8**	**1.8**	**1.1**	NA	NA	NA	NA	31%	2
Mean		**1.0**	**4.4**			**1.3**	NA	NA	NA	NA	47%	3
Median		**0.5**	**5.0**			**1.3**	NA	NA	NA	NA	49%	3
Max		**2.1**	**5.2**			**1.6**	NA	NA	NA	NA	65%	4
Q1		**0.5**	**3.4**			**1.2**	NA	NA	NA	NA	32%	2
Q3		**1.3**	**5.1**			**1.5**	NA	NA	NA	NA	59%	4

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Cadmium

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03												
02/04/03												
02/19/03												
03/05/03												
03/18/03	<0.1		<0.1		<0.1		NA	NA	NA	NA	NA	NA
04/02/03												
04/16/03			<0.1	<0.1							NA	NA
05/06/03												
05/21/03		<0.1	<0.1			<0.1	NA	NA	NA	NA	NA	NA
06/04/03												
06/17/03		<0.1	<0.1			<0.1	NA	NA	NA	NA	NA	NA
06/30/03		<0.1	<0.1			<0.1	NA	NA	NA	NA	NA	NA
07/23/03												
08/05/03												
08/20/03												
09/09/03												
09/22/03												
10/07/03												
10/21/03												
11/04/03												
11/17/03												
01/06/04												
01/20/04												
02/04/04												
02/18/04												
03/03/04												
03/17/04												
Count	**1**	**3**	**5**	**1**	**1**	**3**						
Min	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	NA	NA	NA	NA	NA	NA
Mean		**<0.1**	**<0.1**			**<0.1**	NA	NA	NA	NA	NA	NA
Median		**<0.1**	**<0.1**			**<0.1**	NA	NA	NA	NA	NA	NA
Max		**<0.1**	**<0.1**			**<0.1**	NA	NA	NA	NA	NA	NA
Q1		**<0.1**	**<0.1**			**<0.1**	NA	NA	NA	NA	NA	NA
Q3		**<0.1**	**<0.1**			**<0.1**	NA	NA	NA	NA	NA	NA

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Zinc

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03												
02/04/03												
02/19/03												
03/05/03												
03/18/03	<2.0		3.3		2.0		NA	NA	NA	NA	25%	1.3
04/02/03												
04/16/03			7.0	3.1							39%	3.9
05/06/03												
05/21/03		<2.0	8.0			<2.0	NA	NA	NA	NA	NA	NA
06/04/03												
06/17/03		<2.0	7.2			<2.0	NA	NA	NA	NA	NA	NA
06/30/03		<2.0	4.2			<2.0	NA	NA	NA	NA	NA	NA
07/23/03												
08/05/03												
08/20/03												
09/09/03												
09/22/03												
10/07/03												
10/21/03												
11/04/03												
11/17/03												
01/06/04												
01/20/04												
02/04/04												
02/18/04												
03/03/04												
03/17/04												
Count	**1**	**3**	**5**	**1**	**1**	**3**						
Min	**<2.0**	**<2.0**	**3.3**	**3.1**	**2.0**	**<2.0**	NA	NA	NA	NA	NA	NA
Mean		**<2.0**	**5.9**			**<2.0**	NA	NA	NA	NA	NA	NA
Median		**<2.0**	**7.0**			**<2.0**	NA	NA	NA	NA	NA	NA
Max		**<2.0**	**8.0**			**<2.0**	NA	NA	NA	NA	NA	NA
Q1		**<2.0**	**4.2**			**<2.0**	NA	NA	NA	NA	NA	NA
Q3		**<2.0**	**7.2**			**<2.0**	NA	NA	NA	NA	NA	NA

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Mercury

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03												
02/04/03												
02/19/03												
03/05/03												
03/18/03	<0.2		<0.2		NA				NA	NA		
04/02/03												
04/16/03			<0.2	NA								
05/06/03												
05/21/03		<0.2	<0.2			<0.2	NA	NA	NA	NA	NA	NA
06/04/03												
06/17/03		<0.2	<0.2			<0.2	NA	NA	NA	NA	NA	NA
06/30/03		<0.2	<0.2			<0.2	NA	NA	NA	NA	NA	NA
07/23/03												
08/05/03												
08/20/03												
09/09/03												
09/22/03												
10/07/03												
10/21/03												
11/04/03												
11/17/03												
01/06/04												
01/20/04												
02/04/04												
02/18/04												
03/03/04												
03/17/04												
Count	**1**	**3**	**5**	**NA**	**NA**	**3**						
Min	**<0.2**	**<0.2**	**<0.2**	**NA**	**NA**	**<0.2**	NA	NA	NA	NA	NA	NA
Mean		**<0.2**	**<0.2**	**NA**	**NA**	**<0.2**	NA	NA	NA	NA	NA	NA
Median		**<0.2**	**<0.2**	**NA**	**NA**	**<0.2**	NA	NA	NA	NA	NA	NA
Max		**<0.2**	**<0.2**	**NA**	**NA**	**<0.2**	NA	NA	NA	NA	NA	NA
Q1		**<0.2**	**<0.2**	**NA**	**NA**	**<0.2**	NA	NA	NA	NA	NA	NA
Q3		**<0.2**	**<0.2**	**NA**	**NA**	**<0.2**	NA	NA	NA	NA	NA	NA

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Arsenic

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03												
02/04/03												
02/19/03												
03/05/03												
03/18/03	<4.0		<4.0		<4.0		NA	NA	NA	NA	NA	NA
04/02/03												
04/16/03			<4.0	<4.0							NA	NA
05/06/03												
05/21/03		<4.0	<4.0			<4.0	NA	NA	NA	NA	NA	NA
06/04/03												
06/17/03		<4.0	<4.0			<4.0	NA	NA	NA	NA	NA	NA
06/30/03		<4.0	<4.0			<4.0	NA	NA	NA	NA	NA	NA
07/23/03												
08/05/03												
08/20/03												
09/09/03												
09/22/03												
10/07/03												
10/21/03												
11/04/03												
11/17/03												
01/06/04												
01/20/04												
02/04/04												
02/18/04												
03/03/04												
03/17/04												
Count	**1**	**3**	**5**	**1**	**1**	**3**						
Min	**<4.0**	**<4.0**	**<4.0**	**<4.0**	**<4.0**	**<4.0**	NA	NA	NA	NA	NA	NA
Mean		**<4.0**	**<4.0**			**<4.0**	NA	NA	NA	NA	NA	NA
Median		**<4.0**	**<4.0**			**<4.0**	NA	NA	NA	NA	NA	NA
Max		**<4.0**	**<4.0**			**<4.0**	NA	NA	NA	NA	NA	NA
Q1		**<4.0**	**<4.0**			**<4.0**	NA	NA	NA	NA	NA	NA
Q3		**<4.0**	**<4.0**			**<4.0**	NA	NA	NA	NA	NA	NA

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Chromium

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03												
02/04/03												
02/19/03												
03/05/03												
03/18/03	<1.0		<1.0		<1.0		NA	NA	NA	NA	NA	NA
04/02/03												
04/16/03			<1.0	<1.0							NA	NA
05/06/03												
05/21/03		<1.0	1.1			<1.0	NA	NA	NA	NA	NA	NA
06/04/03												
06/17/03		<1.0	<1.0			<1.0	NA	NA	NA	NA	NA	NA
06/30/03		<1.0	<1.0			<1.0	NA	NA	NA	NA	NA	NA
07/23/03												
08/05/03												
08/20/03												
09/09/03												
09/22/03												
10/07/03												
10/21/03												
11/04/03												
11/17/03												
01/06/04												
01/20/04												
02/04/04												
02/18/04												
03/03/04												
03/17/04												
Count	**1**	**3**	**5**	**1**	**1**	**3**						
Min	**<1.0**	**<1.0**	**<1.0**	**<1.0**	**<1.0**	**<1.0**	NA	NA	NA	NA	NA	NA
Mean		**<1.0**	**0.6**			**<1.0**	NA	NA	NA	NA	NA	NA
Median		**<1.0**	**0.5**			**<1.0**	NA	NA	NA	NA	NA	NA
Max		**<1.0**	**1.1**			**<1.0**	NA	NA	NA	NA	NA	NA
Q1		**<1.0**	**0.5**			**<1.0**	NA	NA	NA	NA	NA	NA
Q3		**<1.0**	**0.5**			**<1.0**	NA	NA	NA	NA	NA	NA

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Lead

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03												
02/04/03												
02/19/03												
03/05/03												
03/18/03	<5.0		<5.0		<5.0		NA	NA	NA	NA	NA	NA
04/02/03												
04/16/03			<5.0	<5.0							NA	NA
05/06/03												
05/21/03		<5.0	<5.0			<5.0	NA	NA	NA	NA	NA	NA
06/04/03												
06/17/03		<5.0	<5.0			<5.0	NA	NA	NA	NA	NA	NA
06/30/03		<5.0	<5.0			<5.0	NA	NA	NA	NA	NA	NA
07/23/03												
08/05/03												
08/20/03												
09/09/03												
09/22/03												
10/07/03												
10/21/03												
11/04/03												
11/17/03												
01/06/04												
01/20/04												
02/04/04												
02/18/04												
03/03/04												
03/17/04												
Count	**1**	**3**	**5**	**1**	**1**	**3**						
Min	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	NA	NA	NA	NA	NA	NA
Mean		**<5.0**	**<5.0**			**<5.0**	NA	NA	NA	NA	NA	NA
Median		**<5.0**	**<5.0**			**<5.0**	NA	NA	NA	NA	NA	NA
Max		**<5.0**	**<5.0**			**<5.0**	NA	NA	NA	NA	NA	NA
Q1		**<5.0**	**<5.0**			**<5.0**	NA	NA	NA	NA	NA	NA
Q3		**<5.0**	**<5.0**			**<5.0**	NA	NA	NA	NA	NA	NA

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Dry Creek Special Study Nickel

Site Description	Tuolumne River @ Mancini Park	Tuolumne River @ Legion Park	**Dry Creek @ La Loma Road**	Tuolumne River @ 9th Street	Tuolumne River @ 7th Street	Tuolumne River @ Audie Peeples Fishing Access	Comparison between Tuolumne River Sites upstream and downstream of Dry Creek confluence		Comparison Between Tuolumne River upstream and Dry Creek (Negative, yellow shaded values indicate higher values in Dry Creek)		Comparison Between Tuolumne River downstream and Dry Creek (Negative, yellow shaded values indicate higher values in Tuolumne River)	
Site Code	STC205	STC216	STC206	STC207	STC214	STC215	RPD	Difference	RPD	Difference	RPD	Difference
01/23/03												
02/04/03												
02/19/03												
03/05/03												
03/18/03	<5.0		<5.0		<5.0		NA	NA	NA	NA	NA	NA
04/02/03												
04/16/03			<5.0	<5.0			NA	NA	NA	NA	NA	NA
05/06/03												
05/21/03		<5.0	<5.0			<5.0	NA	NA	NA	NA	NA	NA
06/04/03												
06/17/03		<5.0	<5.0			<5.0	NA	NA	NA	NA	NA	NA
06/30/03		<5.0	<5.0			<5.0	NA	NA	NA	NA	NA	NA
07/23/03												
08/05/03												
08/20/03												
09/09/03												
09/22/03												
10/07/03												
10/21/03												
11/04/03												
11/17/03												
01/06/04												
01/20/04												
02/04/04												
02/18/04												
03/03/04												
03/17/04												
Count	**1**	**3**	**5**	**1**	**1**	**3**						
Min	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	NA	NA	NA	NA	NA	NA
Mean		**<5.0**	**<5.0**			**<5.0**	NA	NA	NA	NA	NA	NA
Median		**<5.0**	**<5.0**			**<5.0**	NA	NA	NA	NA	NA	NA
Max		**<5.0**	**<5.0**			**<5.0**	NA	NA	NA	NA	NA	NA
Q1		**<5.0**	**<5.0**			**<5.0**	NA	NA	NA	NA	NA	NA
Q3		**<5.0**	**<5.0**			**<5.0**	NA	NA	NA	NA	NA	NA

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Temperature

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03			10		
02/04/03			7		
02/18/03		8	9	10%	0.8
03/06/03		9	10	12%	1.1
03/19/03	11		11	0%	0.0
04/01/03	14		13	7%	-1.0
04/15/03	12		11	9%	-1.0
05/07/03	13		12	8%	-1.0
05/20/03	18		17	6%	-1.0
06/03/03	21		21	0%	0.0
06/18/03	21		21	0%	0.0
06/30/03	21		20	5%	-1.0
07/22/03	23		23	0%	0.0
08/06/03	20		20	0%	0.0
08/19/03	21		21	0%	0.0
09/10/03	17		17	0%	0.0
09/24/03	18		18	0%	0.0
10/08/03	17		17	0%	0.0
10/22/03	15		15	0%	0.0
11/05/03	10		9	6%	-0.6
11/19/03	11		11	0%	0.0
01/07/04	10		9	8%	-0.8
01/20/04	9				
02/04/04	6		6	0%	0.0
02/18/04	9		9	3%	0.3
03/03/04	9		8	10%	-0.9
03/17/04	14		13	7%	-1.0
Count	**23**	**2**	**26**		
Min	**6**		**6**	0%	-1.0
Mean	**15**		**14**	4%	-0.3
Median	**14**		**13**	2%	0.0
Max	**23**		**23**	12%	1.1
Q1	**11**		**9**	0%	-0.9
Q3	**19**		**18**	8%	0.0

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Dissolved Oxygen

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03			12.1		
02/04/03			12.6		
02/18/03		12.2	12.3	1%	0.1
03/06/03		12.5	13.0	4%	0.5
03/19/03	11.7		11.4	3%	-0.3
04/01/03	10.7		10.8	1%	0.1
04/15/03	10.5		11.0	5%	0.5
05/07/03	10.5		10.4	1%	-0.1
05/20/03	10.0		10.3	3%	0.3
06/03/03	8.6		8.9	4%	0.3
06/18/03	9.8		9.6	2%	-0.2
06/30/03	9.6		9.6	1%	-0.1
07/22/03	8.7		8.6	2%	-0.1
08/06/03	8.9		8.8	1%	-0.1
08/19/03	10.4		10.5	1%	0.1
09/10/03	9.2		9.4	2%	0.2
09/24/03	9.4		9.9	5%	0.5
10/08/03	10.0		10.0	0%	0.0
10/22/03	11.7		12.1	3%	0.4
11/05/03	11.2		12.3	9%	1.1
11/19/03	10.5		10.6	1%	0.1
01/07/04	13.1		13.6	4%	0.5
01/20/04	13.3				
02/04/04	15.6		15.8	1%	0.2
02/18/04	14.2		14.2	0%	0.0
03/03/04	12.3		12.5	2%	0.2
03/17/04	11.0		10.9	1%	-0.1
Count	**23**	**2**	**26**		
Min	**8.6**		**8.6**	0%	-0.3
Mean	**10.9**		**11.2**	2%	0.2
Median	**10.5**		**10.9**	2%	0.1
Max	**15.6**		**15.8**	9%	1.1
Q1	**9.7**		**10.0**	1%	-0.1
Q3	**11.7**		**12.3**	3%	0.3

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study pH

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03			7.7		
02/04/03			8.0		
02/18/03		8.1	8.0	1%	-0.1
03/06/03		8.1	8.2	1%	0.1
03/19/03	8.2		7.1	14%	-1.1
04/01/03	8.2		8.0	2%	-0.2
04/15/03	8.2		7.9	4%	-0.3
05/07/03	8.2		8.0	2%	-0.2
05/20/03	8.3		8.0	4%	-0.3
06/03/03	8.1		8.0	1%	-0.1
06/18/03	8.4		8.2	2%	-0.2
06/30/03	8.3		8.2	1%	-0.1
07/22/03	8.3		8.2	1%	-0.1
08/06/03	8.2		8.1	1%	-0.1
08/19/03	8.3		8.2	1%	-0.1
09/10/03	8.2		8.2	0%	0.0
09/24/03	8.0		8.0	0%	0.0
10/08/03	8.1		8.0	1%	-0.1
10/22/03	8.1		7.9	2%	-0.2
11/05/03	8.2		8.0	2%	-0.2
11/19/03	8.2		8.0	2%	-0.2
01/07/04	8.3		8.0	4%	-0.3
01/20/04	8.4				
02/04/04	8.2		7.9	4%	-0.3
02/18/04	7.8		7.8	0%	0.0
03/03/04	8.5		8.0	6%	-0.5
03/17/04	8.6		8.2	5%	-0.4
Count	**23**	**2**	**26**		
Min	**7.8**		**7.1**	0%	-1.1
Mean	**8.2**		**8.0**	3%	-0.2
Median	**8.2**		**8.0**	2%	-0.2
Max	**8.6**		**8.2**	14%	0.1
Q1	**8.2**		**8.0**	1%	-0.3
Q3	**8.3**		**8.2**	4%	-0.1

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Specific Conductance

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03			456		
02/04/03			465		
02/18/03		417	424	2%	7.0
03/06/03		436	437	0%	1.0
03/19/03	281		444	45%	163.0
04/01/03	394		416	5%	22.0
04/15/03	336		366	9%	30.0
05/07/03	278		309	11%	31.0
05/20/03	437		468	7%	31.0
06/03/03	422		467	10%	45.0
06/18/03	381		446	16%	65.0
06/30/03	373		450	19%	77.0
07/22/03	323		443	31%	120.0
08/06/03	300		369	21%	69.0
08/19/03	272		341	23%	69.0
09/10/03	270		332	21%	62.0
09/24/03	163		257	45%	94.0
10/08/03	150		322	73%	172.0
10/22/03	248		293	17%	45.0
11/05/03	285		321	12%	36.0
11/19/03	366		376	3%	10.0
01/07/04	443		492	10%	49.0
01/20/04	376				
02/04/04	192		238	21%	46.0
02/18/04	88		113	25%	25.0
03/03/04	236		303	25%	67.0
03/17/04	207		268	26%	61.0
Count	**23**	**2**	**26**		
Min	**88.0**		**113.0**	0%	1.0
Mean	**296.6**		**369.8**	20%	58.2
Median	**285.0**		**372.5**	18%	47.5
Max	**443.0**		**492.0**	73%	172.0
Q1	**242.0**		**312.0**	10%	30.8
Q3	**374.5**		**445.5**	25%	69.0

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Turbidity

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03			5.3		
02/04/03			2.3		
02/18/03		5.4	5.3	2%	-0.1
03/06/03		2.2	3.3	40%	1.1
03/19/03	4.5		3.6	22%	-0.9
04/01/03	6.0		3.8	45%	-2.2
04/15/03	7.8		8.2	5%	0.4
05/07/03	10.3		6.9	40%	-3.4
05/20/03	2.8		3.7	28%	0.9
06/03/03	5.5		7.4	29%	1.9
06/18/03	4.6		7.3	45%	2.7
06/30/03	7.5		8.1	8%	0.6
07/22/03	3.9		9.9	87%	6.0
08/06/03	3.5		8.9	87%	5.4
08/19/03	3.6		5.4	40%	1.8
09/10/03	4.2		5.0	17%	0.8
09/24/03	4.2		4.4	5%	0.2
10/08/03	3.2		10.0	103%	6.8
10/22/03	3.5		2.7	26%	-0.8
11/05/03	1.8		2.9	47%	1.1
11/19/03	1.5		3.1	70%	1.6
01/07/04	3.0		7.6	87%	4.6
01/20/04	64.0				
02/04/04	16.0		17.3	8%	1.3
02/18/04	142.0		153.0	7%	11.0
03/03/04	NA		NA		
03/17/04	3.8		3.2	17%	-0.6
Count	**22**	**2**	**25**		
Min	**1.5**		**2.3**	2%	-3.4
Mean	**14.0**		**11.9**	38%	1.7
Median	**4.2**		**5.3**	29%	1.1
Max	**142.0**		**153.0**	103%	11.0
Q1	**3.5**		**3.6**	12%	0.0
Q3	**7.1**		**8.1**	46%	2.3

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Total Suspended Solids

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03					
02/04/03					
02/18/03					
03/06/03					
03/19/03	<5.0		<5.0	NA	NA
04/01/03	4.0		<4.0	NA	NA
04/15/03	<4.0		<4.0	NA	NA
05/07/03					
05/20/03	7.2		<4.0	NA	NA
06/03/03	6.8		5.2	27%	-1.6
06/18/03	5.2		6.4	21%	1.2
06/30/03	10.0		11.0	10%	1.0
07/22/03					
08/06/03					
08/19/03					
09/10/03					
09/24/03					
10/08/03					
10/22/03					
11/05/03					
11/19/03					
01/07/04					
01/20/04					
02/04/04					
02/18/04					
03/03/04					
03/17/04					
Count	**7**	**0**	**7**		
Min	**<4.0**		**<4.0**	10%	-1.6
Mean	**5.4**		**4.4**	19%	0.2
Median	**5.2**		**<5.0**	21%	1.0
Max	**10.0**		**11.0**	27%	1.2
Q1	**3.3**		**2.0**	15%	-0.3
Q3	**7.0**		**5.8**	24%	1.1

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Total Organic Carbon

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03					
02/04/03					
02/18/03					
03/06/03					
03/19/03	2.5		2.1	17%	-0.4
04/01/03	1.7		1.3	27%	-0.4
04/15/03	4.0		3.2	22%	-0.8
05/07/03	2.8		2.4	15%	-0.4
05/20/03	1.8		1.7	6%	-0.1
06/03/03	3.3		3.2	3%	-0.1
06/18/03	2.0		2.2	10%	0.2
06/30/03	2.1		2.4	13%	0.3
07/22/03					
08/06/03					
08/19/03					
09/10/03					
09/24/03					
10/08/03					
10/22/03					
11/05/03					
11/19/03					
01/07/04					
01/20/04					
02/04/04					
02/18/04					
03/03/04					
03/17/04					
Count	**8**	**0**	**8**		
Min	**1.7**		**1.3**	3%	-0.8
Mean	**2.5**		**2.3**	14%	-0.2
Median	**2.3**		**2.3**	14%	-0.3
Max	**4.0**		**3.2**	27%	0.3
Q1	**2.0**		**2.0**	9%	-0.4
Q3	**2.9**		**2.6**	19%	0.0

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Total Coliform

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03			687		
02/04/03			326		
02/18/03		548	199	93%	-349.0
03/06/03		240	126	62%	-114.0
03/19/03	1986		649	101%	-1337.0
04/01/03	1011		756	29%	-255.0
04/15/03	1986		1300	42%	-686.0
05/07/03	>2420		>2420	NA	NA
05/20/03	>2420		>2420	NA	NA
06/03/03	>2420		>2420	NA	NA
06/18/03	>2420		>2420	NA	NA
06/30/03	>2420		>2420	NA	NA
07/22/03	>2420		870	NA	NA
08/06/03	>2420		>2420	NA	NA
08/19/03	>2420		2420	NA	NA
09/10/03	>2420		2420	NA	NA
09/24/03	>2420		2420	NA	NA
10/08/03	>2420		2420	NA	NA
10/22/03	>2420		1414	NA	NA
11/05/03	>2420		2420	NA	NA
11/19/03	>2420		1120	NA	NA
01/07/04	>2420		1733	NA	NA
01/20/04	>2420				
02/04/04	1986		1300	42%	-686.0
02/18/04	>2420		>2420	NA	NA
03/03/04	1553		219	151%	-1334.0
03/17/04	>2420		1300	NA	NA
Count	**23**	**2**	**26**		
Min	**1011**		**126**	29%	-1337.0
Mean	**2327**		**1600**	NA	NA
Median	**>2420**		**1574**	NA	NA
Max	**>2420**		**>2420**	NA	NA
Q1	**2500**		**785**	NA	NA
Q3	**2500**		**2480**	NA	NA

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study ***E. coli***

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03			74		
02/04/03			17		
02/18/03		68	59	14%	-9.0
03/06/03		12	6	67%	-6.0
03/19/03	84		96	13%	12.0
04/01/03	206		139	39%	-67.0
04/15/03	225		190	17%	-35.0
05/07/03	435		1300	100%	865.0
05/20/03	365		33	167%	-332.0
06/03/03	548		135	121%	-413.0
06/18/03	361		687	62%	326.0
06/30/03	461		124	115%	-337.0
07/22/03	479		185	89%	-294.0
08/06/03	517		299	53%	-218.0
08/19/03	291		108	92%	-183.0
09/10/03	365		210	54%	-155.0
09/24/03	980		107	161%	-873.0
10/08/03	579		186	103%	-393.0
10/22/03	345		121	96%	-224.0
11/05/03	461		155	99%	-306.0
11/19/03	308		61	134%	-247.0
01/07/04	866		58	175%	-808.0
01/20/04	326				
02/04/04	365		199	59%	-166.0
02/18/04	1553		1986	24%	433.0
03/03/04	921		36	185%	-885.0
03/17/04	166		23	151%	-143.0
Count	**23**	**2**	**26**		
Min	**84**		**6**	13%	-885.0
Mean	**487**		**254**	91%	-185.8
Median	**365**		**123**	94%	-200.5
Max	**1553**		**1986**	185%	865.0
Q1	**317**		**60**	54%	-333.3
Q3	**533**		**189**	124%	-28.5

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Boron

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03					
02/04/03					
02/18/03					
03/06/03					
03/19/03	<0.05		0.15	NA	NA
04/01/03					
04/15/03	<0.05		<0.05	NA	NA
05/07/03					
05/20/03	<0.05		<0.05	NA	NA
06/03/03					
06/18/03	<0.05		<0.05	NA	NA
06/30/03	<0.05		<0.05	NA	NA
07/22/03					
08/06/03					
08/19/03					
09/10/03					
09/24/03					
10/08/03					
10/22/03					
11/05/03					
11/19/03					
01/07/04					
01/20/04					
02/04/04					
02/18/04					
03/03/04					
03/17/04					
Count	**5**	**0**	**5**		
Min	**<0.05**	**0**	**<0.05**		
Mean	**<0.05**	**0**	**0.05**		
Median	**<0.05**	**0**	**0.03**		
Max	**<0.05**	**0**	**0.15**		
Q1	**<0.05**	**0**	**0.03**		
Q3	**<0.05**	**0**	**0.03**		

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Calcium

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03					
02/04/03					
02/18/03					
03/06/03					
03/19/03	29.0		41.0	34%	12.0
04/01/03					
04/15/03	42.0		45.0	7%	3.0
05/07/03					
05/20/03	51.0		54.0	6%	3.0
06/03/03					
06/18/03	47.0		54.0	14%	7.0
06/30/03	46.0		54.0	16%	8.0
07/22/03					
08/06/03					
08/19/03					
09/10/03					
09/24/03					
10/08/03					
10/22/03					
11/05/03					
11/19/03					
01/07/04					
01/20/04					
02/04/04					
02/18/04					
03/03/04					
03/17/04					
Count	**5**	**0**	**5**		
Min	**29.0**	**0**	**41.0**	6%	3.0
Mean	**43.0**	**0**	**49.6**	15%	6.6
Median	**46.0**	**0**	**54.0**	14%	7.0
Max	**51.0**	**0**	**54.0**	34%	12.0
Q1	**42.0**	**0**	**45.0**	7%	3.0
Q3	**47.0**	**0**	**54.0**	16%	8.0

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Magnesium

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03					
02/04/03					
02/18/03					
03/06/03					
03/19/03	15.0		11.0	31%	-4.0
04/01/03					
04/15/03	16.0		16.0	0%	0.0
05/07/03					
05/20/03	20.0		21.0	5%	1.0
06/03/03					
06/18/03	18.0		20.0	11%	2.0
06/30/03	17.0		20.0	16%	3.0
07/22/03					
08/06/03					
08/19/03					
09/10/03					
09/24/03					
10/08/03					
10/22/03					
11/05/03					
11/19/03					
01/07/04					
01/20/04					
02/04/04					
02/18/04					
03/03/04					
03/17/04					
Count	**5**	**0**	**5**		
Min	**15.0**	**0**	**11.0**	0%	-4.0
Mean	**17.2**	**0**	**17.6**	12%	0.4
Median	**17.0**	**0**	**20.0**	11%	1.0
Max	**20.0**	**0**	**21.0**	31%	3.0
Q1	**16.0**	**0**	**16.0**	5%	0.0
Q3	**18.0**	**0**	**20.0**	16%	2.0

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Chloride

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03					
02/04/03					
02/18/03					
03/06/03					
03/19/03	8.1		110.0	173%	101.9
04/01/03					
04/15/03	6.3		6.4	2%	0.1
05/07/03					
05/20/03					
06/03/03					
06/18/03	7.0		8.6	21%	1.6
06/30/03	7.5		8.5	13%	1.0
07/22/03					
08/06/03					
08/19/03					
09/10/03					
09/24/03					
10/08/03					
10/22/03					
11/05/03					
11/19/03					
01/07/04					
01/20/04					
02/04/04					
02/18/04					
03/03/04					
03/17/04					
Count	**4**	**0**	**4**		
Min	**6.3**	**0**	**6.4**	2%	0.1
Mean	**7.2**	**0**	**33.4**	52%	26.2
Median	**7.3**	**0**	**8.6**	17%	1.3
Max	**8.1**	**0**	**110.0**	173%	101.9
Q1	**6.8**	**0**	**8.0**	10%	0.8
Q3	**7.7**	**0**	**34.0**	59%	26.7

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Sulfate

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03					
02/04/03					
02/18/03					
03/06/03					
03/19/03	10.0		50.0	133%	40.0
04/01/03					
04/15/03	16.0		27.0	51%	11.0
05/07/03					
05/20/03					
06/03/03					
06/18/03	16.0		33.0	69%	17.0
06/30/03	16.0		34.0	72%	18.0
07/22/03					
08/06/03					
08/19/03					
09/10/03					
09/24/03					
10/08/03					
10/22/03					
11/05/03					
11/19/03					
01/07/04					
01/20/04					
02/04/04					
02/18/04					
03/03/04					
03/17/04					
Count	**4**	**0**	**4**		
Min	**10.0**	**0**	**27.0**	51%	11.0
Mean	**14.5**	**0**	**36.0**	81%	21.5
Median	**16.0**	**0**	**33.5**	71%	17.5
Max	**16.0**	**0**	**50.0**	133%	40.0
Q1	**14.5**	**0**	**31.5**	65%	15.5
Q3	**16.0**	**0**	**38.0**	87%	23.5

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Hardness

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03					
02/04/03					
02/18/03					
03/06/03					
03/19/03	130		150	14%	20.0
04/01/03					
04/15/03	170		180	6%	10.0
05/07/03					
05/20/03	210		220	5%	10.0
06/03/03					
06/18/03	190		220	15%	30.0
06/30/03	180		220	20%	40.0
07/22/03					
08/06/03					
08/19/03					
09/10/03					
09/24/03					
10/08/03					
10/22/03					
11/05/03					
11/19/03					
01/07/04					
01/20/04					
02/04/04					
02/18/04					
03/03/04					
03/17/04					
Count	**5**	**0**	**5**		
Min	**130**	**0**	**150**	5%	10.0
Mean	**176**	**0**	**198**	12%	22.0
Median	**180**	**0**	**220**	14%	20.0
Max	**210**	**0**	**220**	20%	40.0
Q1	**170**	**0**	**180**	6%	10.0
Q3	**190**	**0**	**220**	15%	30.0

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Copper

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03					
02/04/03					
02/18/03					
03/06/03					
03/19/03	2.0		3.4	52%	1.4
04/01/03					
04/15/03	1.7		5.8	109%	4.1
05/07/03					
05/20/03	1.7		5.5	106%	3.8
06/03/03					
06/18/03	1.3		4.4	109%	3.1
06/30/03	1.1		<1.0	NA	NA
07/22/03					
08/06/03					
08/19/03					
09/10/03					
09/24/03					
10/08/03					
10/22/03					
11/05/03					
11/19/03					
01/07/04					
01/20/04					
02/04/04					
02/18/04					
03/03/04					
03/17/04					
Count	**5**	**0**	**5**		
Min	**1.1**	**0**	**<1.0**	52%	1.4
Mean	**1.6**	**0**	**3.9**	94%	3.1
Median	**1.7**	**0**	**4.4**	107%	3.5
Max	**2.0**	**0**	**5.8**	109%	4.1
Q1	**1.3**	**0**	**3.4**	92%	2.7
Q3	**1.7**	**0**	**5.5**	109%	3.9

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Cadmium

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03					
02/04/03					
02/18/03					
03/06/03					
03/19/03	<0.1		0.39	NA	NA
04/01/03					
04/15/03	<0.1		0.23	NA	NA
05/07/03					
05/20/03	<0.1		0.33	NA	NA
06/03/03					
06/18/03	<0.1		0.50	NA	NA
06/30/03	<0.1		0.76	NA	NA
07/22/03					
08/06/03					
08/19/03					
09/10/03					
09/24/03					
10/08/03					
10/22/03					
11/05/03					
11/19/03					
01/07/04					
01/20/04					
02/04/04					
02/18/04					
03/03/04					
03/17/04					
Count	**5**	**0**	**5**		
Min	**<0.1**	**0**	**0.23**	NA	NA
Mean	**<0.1**	**0**	**0.44**	NA	NA
Median	**<0.1**	**0**	**0.39**	NA	NA
Max	**<0.1**	**0**	**0.76**	NA	NA
Q1	**<0.1**	**0**	**0.33**	NA	NA
Q3	**<0.1**	**0**	**0.50**	NA	NA

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Zinc

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03					
02/04/03					
02/18/03					
03/06/03					
03/19/03	23.0		19.0	19%	-4.0
04/01/03					
04/15/03	14.0		20.0	35%	6.0
05/07/03					
05/20/03	5.6		19.0	109%	13.4
06/03/03					
06/18/03	4.7		28.0	143%	23.3
06/30/03	5.6		38.0	149%	32.4
07/22/03					
08/06/03					
08/19/03					
09/10/03					
09/24/03					
10/08/03					
10/22/03					
11/05/03					
11/19/03					
01/07/04					
01/20/04					
02/04/04					
02/18/04					
03/03/04					
03/17/04					
Count	**5**	**0**	**5**		
Min	**4.7**	**0**	**19.0**	19%	-4.0
Mean	**10.6**	**0**	**24.8**	91%	14.2
Median	**5.6**	**0**	**20.0**	109%	13.4
Max	**23.0**	**0**	**38.0**	149%	32.4
Q1	**5.6**	**0**	**19.0**	35%	6.0
Q3	**14.0**	**0**	**28.0**	143%	23.3

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Mercury

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03					
02/04/03					
02/18/03					
03/06/03					
03/19/03	<0.2		<0.2	NA	NA
04/01/03					
04/15/03	<0.2		<0.2	NA	NA
05/07/03					
05/20/03	<0.2		<0.2	NA	NA
06/03/03					
06/18/03	<0.2		<0.2	NA	NA
06/30/03	<0.2		<0.2	NA	NA
07/22/03					
08/06/03					
08/19/03					
09/10/03					
09/24/03					
10/08/03					
10/22/03					
11/05/03					
11/19/03					
01/07/04					
01/20/04					
02/04/04					
02/18/04					
03/03/04					
03/17/04					
Count	**5**	**0**	**5**		
Min	**<0.2**	**0**	**<0.2**	NA	NA
Mean	**<0.2**	**0**	**<0.2**	NA	NA
Median	**<0.2**	**0**	**<0.2**	NA	NA
Max	**<0.2**	**0**	**<0.2**	NA	NA
Q1	**<0.2**	**0**	**<0.2**	NA	NA
Q3	**<0.2**	**0**	**<0.2**	NA	NA

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Arsenic

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03					
02/04/03					
02/18/03					
03/06/03					
03/19/03	<4.0		<4.0	NA	NA
04/01/03					
04/15/03	<4.0		<4.0	NA	NA
05/07/03					
05/20/03	<4.0		<4.0	NA	NA
06/03/03					
06/18/03	<4.0		<4.0	NA	NA
06/30/03	<4.0		<4.0	NA	NA
07/22/03					
08/06/03					
08/19/03					
09/10/03					
09/24/03					
10/08/03					
10/22/03					
11/05/03					
11/19/03					
01/07/04					
01/20/04					
02/04/04					
02/18/04					
03/03/04					
03/17/04					
Count	**5**	**0**	**5**		
Min	**<4.0**	**0**	**<4.0**	NA	NA
Mean	**<4.0**	**0**	**<4.0**	NA	NA
Median	**<4.0**	**0**	**<4.0**	NA	NA
Max	**<4.0**	**0**	**<4.0**	NA	NA
Q1	**<4.0**	**0**	**<4.0**	NA	NA
Q3	**<4.0**	**0**	**<4.0**	NA	NA

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Chromium

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03					
02/04/03					
02/18/03					
03/06/03					
03/19/03	<1.0		<1.0	NA	NA
04/01/03					
04/15/03	<1.0		<1.0	NA	NA
05/07/03					
05/20/03	<1.0		<1.0	NA	NA
06/03/03					
06/18/03	<1.0		<1.0	NA	NA
06/30/03	<1.0		<1.0	NA	NA
07/22/03					
08/06/03					
08/19/03					
09/10/03					
09/24/03					
10/08/03					
10/22/03					
11/05/03					
11/19/03					
01/07/04					
01/20/04					
02/04/04					
02/18/04					
03/03/04					
03/17/04					
Count	**5**	**0**	**5**		
Min	**<1.0**	**0**	**<1.0**	NA	NA
Mean	**<1.0**	**0**	**<1.0**	NA	NA
Median	**<1.0**	**0**	**<1.0**	NA	NA
Max	**<1.0**	**0**	**<1.0**	NA	NA
Q1	**<1.0**	**0**	**<1.0**	NA	NA
Q3	**<1.0**	**0**	**<1.0**	NA	NA

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Lead

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03					
02/04/03					
02/18/03					
03/06/03					
03/19/03	<5.0		<5.0	NA	NA
04/01/03					
04/15/03	<5.0		<5.0	NA	NA
05/07/03					
05/20/03	<5.0		<5.0	NA	NA
06/03/03					
06/18/03	<5.0		<5.0	NA	NA
06/30/03	<5.0		<5.0	NA	NA
07/22/03					
08/06/03					
08/19/03					
09/10/03					
09/24/03					
10/08/03					
10/22/03					
11/05/03					
11/19/03					
01/07/04					
01/20/04					
02/04/04					
02/18/04					
03/03/04					
03/17/04					
Count	**5**	**0**	**5**		
Min	**<5.0**	**0**	**<5.0**	NA	NA
Mean	**<5.0**	**0**	**<5.0**	NA	NA
Median	**<5.0**	**0**	**<5.0**	NA	NA
Max	**<5.0**	**0**	**<5.0**	NA	NA
Q1	**<5.0**	**0**	**<5.0**	NA	NA
Q3	**<5.0**	**0**	**<5.0**	NA	NA

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Woods Creek Special Study Nickel

Site Description	Woods Creek @ Motherlode Fairgrounds	Woods Creek @ Highway 108	Woods Creek @ Mill Villa Drive	Relative Percent Difference	Difference
Site Code	TUO208	TUO205	TUO202		
01/21/03					
02/04/03					
02/18/03					
03/06/03					
03/19/03	<5.0		<5.0	NA	NA
04/01/03					
04/15/03	<5.0		<5.0	NA	NA
05/07/03					
05/20/03	<5.0		<5.0	NA	NA
06/03/03					
06/18/03	<5.0		<5.0	NA	NA
06/30/03	<5.0		<5.0	NA	NA
07/22/03					
08/06/03					
08/19/03					
09/10/03					
09/24/03					
10/08/03					
10/22/03					
11/05/03					
11/19/03					
01/07/04					
01/20/04					
02/04/04					
02/18/04					
03/03/04					
03/17/04					
Count	**5**	**0**	**5**		
Min	**<5.0**	**0**	**<5.0**	NA	NA
Mean	**<5.0**	**0**	**<5.0**	NA	NA
Median	**<5.0**	**0**	**<5.0**	NA	NA
Max	**<5.0**	**0**	**<5.0**	NA	NA
Q1	**<5.0**	**0**	**<5.0**	NA	NA
Q3	**<5.0**	**0**	**<5.0**	NA	NA

Decreasing concentrations, moving from upstream to downstream

Significantly different, based on an RPD of <25%. Where one result is outside of reporting limit, when possible, RPD significance is based on the reporting limit.

NA — Unable to Calculate (One or both results outside of reporting limits)

No Result

Appendix H:
Precipitation and Flow Data

IB Sampling	Date	Stanislaus @ Don Pedro - DNP (precipitation in inches)	Stanislaus @ Orange Blossom - OBB (flow in cfs)	Tuolumne @ New Melones Dam - NML (precipitation in inches)	Tuolumne @ La Grange - LGN (flow in cfs)	Merced R @ Exchequer Dam - EXC (precipitation in inches)	Merced Nr Snelling - MSN (flow in cfs)
		Daily Volumes					
	1/1/2003	0.00	367.00	**0.16**	181.00	0.00	200
	1/2/2003	0.00	339.00	0.00	182.00	0.00	199
	1/3/2003	0.00	338.00	0.00	181.00	0.00	198
	1/4/2003	0.00	334.00	0.00	183.00	0.00	197
	1/5/2003	0.00	334.00	0.00	183.00	0.00	199
	1/6/2003	0.00	335.00	0.00	182.00	0.00	198
	1/7/2003	0.00	331.00	0.00	184.00	0.00	196
	1/8/2003	0.00	336.00	0.00	182.00	0.00	188
	1/9/2003	0.00	333.00	0.00	185.00	0.00	187
	1/10/2003	0.00	366.00	**0.62**	185.00	0.00	233
	1/11/2003	0.00	362.00	**0.20**	185.00	0.00	197
	1/12/2003	0.00	349.00	0.02	182.00	0.00	190
1/14/2003	1/13/2003	0.00	338.00	0.00	183.00	0.00	187
	1/14/2003	0.00	297.00	0.00	182.00	0.00	183
	1/15/2003	0.00	277.00	0.00	182.00	0.00	180
	1/16/2003	0.00	276.00	0.00	182.00	0.00	179
	1/17/2003	0.00	273.00	0.00	179.00	0.00	179
	1/18/2003	0.00	274.00	0.00	180.00	0.00	179
	1/19/2003	0.00	268.00	0.01	179.00	0.00	179
1/21/2003	1/20/2003	0.00	269.00	0.02	180.00	0.00	183
1/22/2003	1/21/2003	0.00	270.00	0.00	179.00	0.00	183
1/23/2003	1/22/2003	0.00	271.00	0.02	184.00	0.00	181
	1/23/2003	0.00	270.00	0.05	184.00	0.00	178
	1/24/2003	0.00	275.00	0.02	183.00	0.00	178
	1/25/2003	0.00	291.00	0.00	181.00	0.00	177
	1/26/2003	0.00	293.00	0.03	182.00	0.00	174
	1/27/2003	0.00	543.00	0.01	183.00	0.00	175
	1/28/2003	0.00	744.00	0.00	181.00	0.00	177
	1/29/2003	0.00	505.00	0.00	179.00	0.00	180
	1/30/2003	0.00	321.00	0.00	180.00	0.00	178
	1/31/2003	0.00	342.00	0.00	182.00	0.00	183
	2/1/2003	0.00	407.00	0.01	180.00	0.00	204
	2/2/2003	0.00	400.00	0.01	182.00	0.00	218
2/4/2003	2/3/2003	0.00	399.00	0.00	182.00	0.00	230
2/5/2003	2/4/2003	0.00	404.00	0.00	182.00	0.00	213
	2/5/2003	0.00	408.00	0.00	182.00	0.00	212
	2/6/2003	0.00	449.00	**0.10**	183.00	0.00	213
	2/7/2003	0.00	450.00	0.00	183.00	0.00	211
	2/8/2003	0.00	451.00	0.00	233.00	0.00	207
	2/9/2003	0.00	456.00	0.00	182.00	0.00	207
	2/10/2003	0.00	455.00	0.00	1761.00	0.00	205
	2/11/2003	0.00	464.00	0.00	184.00	0.00	203
	2/12/2003	0.00	460.00	0.00	184.00	0.00	206
	2/13/2003	0.00	534.00	**0.68**	183.00	0.00	234
	2/14/2003	0.00	537.00	0.07	184.00	0.00	240
	2/15/2003	0.00	534.00	0.00	184.00	0.00	242
	2/16/2003	0.00	543.00	**0.60**	182.00	0.00	244
2/18/2003	2/17/2003	0.00	533.00	0.00	184.00	0.00	241
2/19/2003	2/18/2003	0.00	537.00	0.00	186.00	0.00	244
2/20/2003	2/19/2003	0.00	538.00	0.01	188.00	0.00	244
	2/20/2003	0.00	528.00	**0.19**	181.00	0.00	243
	2/21/2003	0.00	503.00	0.01	180.00	0.00	242
	2/22/2003	0.00	505.00	0.00	180.00	0.00	241
	2/23/2003	0.00	503.00	0.01	181.00	0.00	241
	2/24/2003	0.00	506.00	0.00	181.00	0.00	241
	2/25/2003	0.00	501.00	**0.18**	181.00	0.00	244
	2/26/2003	0.00	494.00	0.00	181.00	0.00	244
	2/27/2003	0.00	477.00	0.08	182.00	0.00	244
	2/28/2003	0.00	473.00	0.06	180.00	0.00	246
	3/1/2003	0.00	475.00	0.00	181.00	0.00	245
	3/2/2003	0.00	477.00	0.00	182.00	0.00	246
3/4/2003	3/3/2003	0.00	477.00	0.00	183.00	0.00	245
3/5/2003	3/4/2003	0.00	466.00	0.00	182.00	0.00	245
3/6/2003	3/5/2003	0.00	462.00	0.00	183.00	0.00	247
	3/6/2003	0.00	464.00	0.00	182.00	0.00	248
	3/7/2003	0.00	464.00	0.00	182.00	0.00	254
	3/8/2003	0.00	461.00	0.00	184.00	0.00	244
	3/9/2003	0.00	460.00	0.00	185.00	0.00	243
	3/10/2003	0.00	459.00	0.00	178.00	0.00	245
	3/11/2003	0.00	468.00	0.00	175.00	0.00	222
	3/12/2003	0.00	471.00	0.00	174.00	0.00	208
	3/13/2003	0.00	468.00	0.00	174.00	0.00	211

Sampling Events

Bold Storm, using definition of a rainfall event that produces more than 0.1 inch of precipitation (Standard Urban Storm Water Mitigation Plan Development Planning Change Sheet, dated January 25, 2000, retrieved from www.swrcb.ca.gov/rwqcb4/water_issues/programs/stormwater/susmp/susmp_changesheet2.pdf)

IB Sampling	Date	Stanislaus @ Don Pedro - DNP (precipitation in inches)	Stanislaus @ Orange Blossom - OBB (flow in cfs)	Tuolumne @ New Melones Dam - NML (precipitation in inches)	Tuolumne @ La Grange - LGN (flow in cfs)	Merced R @ Exchequer Dam - EXC (precipitation in inches)	Merced Nr Snelling - MSN (flow in cfs)
		Daily Volumes					
	3/14/2003	0.00	468.00	0.00	172.00	0.00	228
	3/15/2003	0.00	491.00	**0.81**	175.00	0.00	263
	3/16/2003	0.00	481.00	**0.63**	174.00	0.00	242
3/18/2003	3/17/2003	0.00	469.00	0.05	172.00	0.00	229
3/19/2003	3/18/2003	0.00	439.00	0.00	173.00	0.00	229
3/20/2003	3/19/2003	0.00	435.00	0.00	170.00	0.00	228
	3/20/2003	0.00	437.00	0.04	173.00	0.00	222
	3/21/2003	0.00	437.00	0.00	176.00	0.00	229
	3/22/2003	0.00	437.00	0.00	179.00	0.00	224
	3/23/2003	0.00	441.00	**0.12**	178.00	0.00	231
	3/24/2003	0.00	439.00	**0.18**	186.00	0.00	226
	3/25/2003	0.00	437.00	0.00	186.00	0.00	213
	3/26/2003	0.00	435.00	0.02	187.00	0.00	226
	3/27/2003	0.00	434.00	0.00	181.00	0.00	229
	3/28/2003	0.00	433.00	0.00	184.00	0.00	236
	3/29/2003	0.00	438.00	0.00	181.00	0.00	247
	3/30/2003	0.00	451.00	0.00	181.00	0.00	250
4/1/2003	3/31/2003	0.00	530.00	0.00	178.00	0.00	252
4/2/2003	4/1/2003	0.00	535.00	0.00	179.00	**0.22**	253
4/3/2003	4/2/2003	**0.34**	534.00	**0.74**	179.00	**0.61**	265
	4/3/2003	**0.37**	546.00	**0.19**	177.00	**0.15**	266
	4/4/2003	**0.29**	602.00	**0.46**	178.00	**0.27**	258
	4/5/2003	**0.29**	589.00	**0.34**	180.00	0.00	256
	4/6/2003	0.00	586.00	0.00	178.00	0.00	257
	4/7/2003	0.00	606.00	0.00	181.00	0.00	255
	4/8/2003	0.00	654.00	0.00	179.00	0.00	253
	4/9/2003	0.00	657.00	0.00	180.00	0.00	253
	4/10/2003	0.00	658.00	0.00	179.00	0.00	343
	4/11/2003	0.00	667.00	0.00	298.00	0.00	558
	4/12/2003	0.00	670.00	0.00	459.00	**0.51**	728
	4/13/2003	**0.29**	639.00	**1.00**	842.00	**1.36**	719
4/15/2003	4/14/2003	**0.80**	557.00	**0.56**	1217.00	0.03	709
4/16/2003	4/15/2003	0.01	553.00	**0.32**	1230.00	0.04	715
4/17/2003	4/16/2003	0.00	551.00	0.02	1228.00	**0.46**	735
	4/17/2003	**0.17**	553.00	**0.11**	1227.00	0.04	729
	4/18/2003	0.02	550.00	0.00	1244.00	0.00	724
	4/19/2003	0.00	549.00	0.04	1247.00	0.00	720
	4/20/2003	0.00	550.00	0.00	1253.00	0.00	703
	4/21/2003	0.00	552.00	0.06	1249.00	0.08	663
	4/22/2003	**0.29**	**553.00**	**0.25**	1185.00	0.00	575
	4/23/2003	0.00	582.00	0.00	957.00	0.00	534
	4/24/2003	0.00	934.00	0.00	759.00	**0.10**	547
	4/25/2003	**0.23**	**1266.00**	**0.55**	565.00	0.05	559
	4/26/2003	**0.16**	**1266.00**	**0.52**	573.00	0.00	560
	4/27/2003	0.00	1266.00	0.00	572.00	**0.48**	557
	4/28/2003	**0.62**	**1275.00**	**0.71**	575.00	0.00	567
	4/29/2003	0.00	1270.00	0.00	551.00	0.00	565
	4/30/2003	0.01	1268.00	0.00	524.00	0.00	598
	5/1/2003	0.00	1269.00	0.00	525.00	0.09	746
	5/2/2003	0.09	1274.00	0.00	528.00	**0.71**	1035
	5/3/2003	**0.50**	1131.00	**0.30**	532.00	**0.95**	1383
	5/4/2003	**0.21**	849.00	**0.30**	531.00	0.00	1509
5/6/2003	5/5/2003	0.01	529.00	0.01	529.00	0.00	1502
5/7/2003	5/6/2003	0.00	515.00	0.00	595.00	0.00	1498
5/8/2003	5/7/2003	0.00	518.00	0.00	589.00	0.00	1521
	5/8/2003	0.00	517.00	0.01	589.00	0.07	1517
	5/9/2003	0.00	519.00	**0.20**	581.00	0.00	1530
	5/10/2003	0.00	521.00	0.00	585.00	0.00	1522
	5/11/2003	0.00	523.00	0.00	587.00	0.00	1146
	5/12/2003	0.00	633.00	0.00	542.00	0.00	682
	5/13/2003	0.00	691.00	0.00	482.00	0.00	487
	5/14/2003	0.00	752.00	0.00	400.00	0.00	357
	5/15/2003	0.00	748.00	0.00	346.00	0.00	305
	5/16/2003	0.00	760.00	0.00	300.00	0.00	289
	5/17/2003	0.00	854.00	0.00	225.00	0.00	271
	5/18/2003	0.00	976.00	0.00	182.00	0.00	280
5/20/2003	5/19/2003	0.00	971.00	0.00	181.00	0.00	290
5/21/2003	5/20/2003	0.00	976.00	0.00	352.00	0.00	288
5/22/2003	5/21/2003	0.00	855.00	0.00	555.00	0.00	285
	5/22/2003	0.00	652.00	0.00	558.00	0.00	282
	5/23/2003	0.00	651.00	0.00	561.00	0.00	267
	5/24/2003	0.00	655.00	0.00	560.00	0.00	280

Sampling Events

Bold Storm, using definition of a rainfall event that produces more than 0.1 inch of precipitation (Standard Urban Storm Water Mitigation Plan Development Planning Change Sheet, dated January 25, 2000, retrieved from www.swrcb.ca.gov/rwqcb4/water_issues/programs/stormwater/susmp/susmp_changesheet2.pdf)

IB Sampling	Date	Stanislaus @ Don Pedro - DNP (precipitation in inches)	Stanislaus @ Orange Blossom - OBB (flow in cfs)	Tuolumne @ New Melones Dam - NML (precipitation in inches)	Tuolumne @ La Grange - LGN (flow in cfs)	Merced R @ Exchequer Dam - EXC (precipitation in inches)	Merced Nr Snelling - MSN (flow in cfs)
		Daily Volumes					
	5/25/2003	0.00	658.00	0.00	560.00	0.00	287
	5/26/2003	0.00	659.00	0.00	560.00	0.00	308
	5/27/2003	0.00	710.00	0.00	560.00	0.00	291
	5/28/2003	0.00	925.00	0.00	558.00	0.00	273
	5/29/2003	0.00	1011.00	0.00	504.00	0.00	268
	5/30/2003	0.00	1021.00	0.00	321.00	0.00	264
	5/31/2003	0.00	1005.00	0.00	265.00	0.00	264
	6/1/2003	0.00	1023.00	0.00	265.00	0.00	265
6/3/2003	6/2/2003	0.00	1021.00	0.00	265.00	0.00	274
6/4/2003	6/3/2003	0.00	1022.00	0.00	270.00	0.00	259
6/5/2003	6/4/2003	0.00	1020.00	0.00	272.00	0.00	256
	6/5/2003	0.00	1050.00	0.00	272.00	0.00	261
	6/6/2003	0.00	1208.00	0.00	275.00	0.00	252
	6/7/2003	0.00	1200.00	0.00	267.00	0.00	253
	6/8/2003	0.00	1200.00	0.00	263.00	0.00	250
	6/9/2003	0.00	1199.00	0.00	264.00	0.00	252
	6/10/2003	0.00	1200.00	0.00	270.00	0.00	252
	6/11/2003	0.00	1207.00	0.00	269.00	0.00	249
	6/12/2003	0.00	1101.00	0.00	270.00	0.00	248
	6/13/2003	0.00	1118.00	0.00	240.00	0.00	240
	6/14/2003	0.00	1165.00	0.00	191.00	0.00	236
	6/15/2003	0.00	1169.00	0.00	191.00	0.00	244
6/17/2003	6/16/2003	0.00	1168.00	0.00	192.00	0.00	256
6/18/2003	6/17/2003	0.00	1171.00	0.00	193.00	0.00	256
6/19/2003	6/18/2003	0.00	1213.00	0.00	192.00	0.00	250
	6/19/2003	0.00	1242.00	0.00	191.00	0.00	247
	6/20/2003	0.00	1234.00	0.00	180.00	0.00	241
	6/21/2003	0.00	1240.00	0.00	184.00	0.00	235
	6/22/2003	0.00	1240.00	0.00	183.00	0.00	233
	6/23/2003	0.00	1255.00	0.00	181.00	0.00	234
	6/24/2003	0.00	1240.00	0.00	187.00	0.00	242
	6/25/2003	0.00	1235.00	0.00	239.00	0.00	255
	6/26/2003	0.00	1228.00	0.00	244.00	0.00	234
	6/27/2003	0.00	1232.00	0.00	247.00	0.00	223
	6/28/2003	0.00	1241.00	0.00	241.00	0.00	230
6/30/2003	6/29/2003	0.00	1245.00	0.00	250.00	0.00	222
	6/30/2003	0.00	1131.00	0.00	220.00	0.00	219
	7/1/2003	0.00	653.00	0.00	200.00	0.00	212
	7/2/2003	0.00	604.00	0.00	210.00	0.00	219
	7/3/2003	0.00	601.00	0.00	247.00	0.00	219
	7/4/2003	0.00	607.00	0.00	247.00	0.00	209
	7/5/2003	0.00	604.00	0.00	248.00	0.00	208
	7/6/2003	0.00	602.00	0.00	248.00	0.00	226
	7/7/2003	0.00	594.00	0.00	197.00	0.00	219
	7/8/2003	0.00	513.00	0.00	201.00	0.00	223
	7/9/2003	0.00	494.00	0.00	244.00	0.00	224
	7/10/2003	0.00	491.00	0.00	246.00	0.00	225
	7/11/2003	0.00	430.00	0.00	240.00	0.00	218
	7/12/2003	0.00	421.00	0.00	242.00	0.00	224
	7/13/2003	0.00	419.00	0.00	242.00	0.00	224
	7/14/2003	0.00	417.00	0.00	247.00	0.00	224
	7/15/2003	0.00	417.00	0.00	245.00	0.00	220
	7/16/2003	0.00	435.00	0.00	252.00	0.00	221
	7/17/2003	0.00	458.00	0.00	250.00	0.00	222
	7/18/2003	0.00	446.00	0.00	247.00	0.00	220
	7/19/2003	0.00	447.00	0.00	249.00	0.00	211
	7/20/2003	0.00	455.00	0.00	237.00	0.00	211
7/22/2003	7/21/2003	0.00	407.00	0.00	257.00	0.00	208
7/23/2003	7/22/2003	0.00	397.00	0.00	258.00	0.00	221
	7/23/2003	0.00	390.00	0.00	258.00	0.00	218
	7/24/2003	0.00	372.00	0.00	242.00	0.00	207
	7/25/2003	0.00	363.00	0.00	245.00	0.00	227
	7/26/2003	0.00	363.00	0.00	247.00	0.00	238
	7/27/2003	0.00	375.00	0.00	253.00	0.00	232
	7/28/2003	0.00	387.00	0.00	243.00	0.00	240
	7/29/2003	0.00	365.00	0.00	246.00	0.01	232
7/31/2003	7/30/2003	0.00	428.00	0.00	243.00	0.00	233
	7/31/2003	0.00	426.00	0.00	250.00	0.00	213
	8/1/2003	0.00	408.00	**0.16**	238.00	0.02	206
	8/2/2003	0.00	413.00	**0.20**	227.00	0.00	211
	8/3/2003	0.00	426.00	**0.20**	214.00	**0.41**	212
8/5/2003	8/4/2003	0.00	406.00	0.00	209.00	0.00	219

Sampling Events

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IB Sampling	Date	Stanislaus @ Don Pedro - DNP (precipitation in inches)	Stanislaus @ Orange Blossom - OBB (flow in cfs)	Tuolumne @ New Melones Dam - NML (precipitation in inches)	Tuolumne @ La Grange - LGN (flow in cfs)	Merced R @ Exchequer Dam - EXC (precipitation in inches)	Merced Nr Snelling - MSN (flow in cfs)
		Daily Volumes					
8/6/2003	8/5/2003	0.00	380.00	0.00	210.00	0.00	219
8/7/2003	8/6/2003	0.00	375.00	0.00	212.00	0.00	206
	8/7/2003	0.00	344.00	0.00	200.00	0.00	201
	8/8/2003	0.00	348.00	0.00	205.00	0.00	202
	8/9/2003	0.00	351.00	0.00	211.00	0.00	201
	8/10/2003	0.00	349.00	0.00	209.00	0.00	202
	8/11/2003	0.00	345.00	0.00	209.00	0.00	212
	8/12/2003	0.00	342.00	0.00	213.00	0.00	195
	8/13/2003	0.00	311.00	0.00	206.00	0.00	162
	8/14/2003	0.00	309.00	0.00	211.00	0.00	167
	8/15/2003	0.00	310.00	0.00	207.00	0.00	168
	8/16/2003	0.00	312.00	0.00	204.00	0.00	172
	8/17/2003	0.00	311.00	0.00	240.00	0.00	166
8/19/2003	8/18/2003	0.00	310.00	0.00	249.00	0.00	185
8/20/2003	8/19/2003	0.00	308.00	0.00	247.00	0.00	178
8/21/2003	8/20/2003	0.00	311.00	0.00	208.00	0.00	174
	8/21/2003	0.00	312.00	0.00	213.00	0.00	169
	8/22/2003	0.04	313.00	0.00	219.00	0.02	179
	8/23/2003	0.00	313.00	0.00	755.00	0.00	182
	8/24/2003	0.00	307.00	0.00	231.00	0.00	183
	8/25/2003	0.00	305.00	0.00	251.00	0.00	185
	8/26/2003	0.00	304.00	0.07	242.00	0.01	164
8/28/2003	8/27/2003	0.00	305.00	0.00	211.00	0.00	155
	8/28/2003	0.00	306.00	0.00	1710.00	0.00	159
	8/29/2003	0.00	305.00	0.00	242.00	0.00	159
	8/30/2003	0.00	311.00	0.00	244.00	0.00	158
	8/31/2003	0.00	307.00	0.00	223.00	0.00	155
	9/1/2003	0.00	307.00	0.00	253.00	0.00	157
	9/2/2003	0.00	303.00	0.00	256.00	**0.11**	158
	9/3/2003	0.00	307.00	0.00	247.00	0.00	161
	9/4/2003	0.00	301.00	0.00	250.00	0.00	144
	9/5/2003	0.00	302.00	0.00	250.00	0.00	146
	9/6/2003	0.00	300.00	0.00	215.00	0.00	143
	9/7/2003	0.00	306.00	0.00	212.00	0.00	146
9/9/2003	9/8/2003	0.00	290.00	0.00	206.00	0.00	142
9/10/2003	9/9/2003	0.00	286.00	0.00	217.00	0.00	134
9/11/2003	9/10/2003	0.00	283.00	0.00	255.00	0.00	135
	9/11/2003	0.00	286.00	0.00	220.00	0.00	136
	9/12/2003	0.00	283.00	0.00	245.00	0.00	138
	9/13/2003	0.00	281.00	0.00	242.00	0.00	134
	9/14/2003	0.00	280.00	0.00	244.00	0.00	134
	9/15/2003	0.00	281.00	0.00	246.00	0.00	140
	9/16/2003	0.00	274.00	0.00	223.00	0.00	138
	9/17/2003	0.00	272.00	0.00	212.00	0.00	142
	9/18/2003	0.00	271.00	0.00	209.00	0.00	141
	9/19/2003	0.00	273.00	0.00	198.00	0.00	143
	9/20/2003	0.00	273.00	0.00	233.00	0.00	148
9/22/2003	9/21/2003	0.00	276.00	0.00	235.00	0.00	148
9/24/2003	9/22/2003	0.00	275.00	0.00	240.00	0.00	148
9/25/2003	9/23/2003	0.00	268.00	0.00	246.00	0.00	143
	9/24/2003	0.00	268.00	0.00	247.00	0.00	129
	9/25/2003	0.00	264.00	0.00	211.00	0.00	131
	9/26/2003	0.00	256.00	0.00	221.00	0.00	137
	9/27/2003	0.00	258.00	0.00	207.00	0.00	133
	9/28/2003	0.00	254.00	0.00	210.00	0.00	122
	9/29/2003	0.00	254.00	0.00	205.00	0.00	119
	9/30/2003	0.00	260.00	0.00	259.00	0.00	118
	10/1/2003	0.00	255.00	0.00	211.00	0.00	118
	10/2/2003	0.00	256.00	0.00	214.00	0.00	138
	10/3/2003	0.00	255.00	0.00	215.00	0.00	165
	10/4/2003	0.00	251.00	0.00	215.00	0.00	163
	10/5/2003	0.00	255.00	0.00	215.00	0.00	164
10/7/2003	10/6/2003	0.00	253.00	0.00	217.00	0.00	164
10/8/2003	10/7/2003	0.00	252.00	0.00	213.00	0.00	168
10/9/2003	10/8/2003	0.00	252.00	0.00	216.00	0.00	174
	10/9/2003	0.00	253.00	0.00	218.00	0.00	179
	10/10/2003	0.00	256.00	0.00	220.00	0.00	193
	10/11/2003	0.00	258.00	0.00	219.00	0.00	200
	10/12/2003	0.00	257.00	0.00	219.00	0.00	197
	10/13/2003	0.00	258.00	0.00	221.00	0.00	201
	10/14/2003	0.00	257.00	0.00	220.00	0.00	202
	10/15/2003	0.00	257.00	0.00	229.00	0.00	227
	10/16/2003	0.00	260.00	0.00	456.00	0.00	291

Sampling Events

Bold Storm, using definition of a rainfall event that produces more than 0.1 inch of precipitation (Standard Urban Storm Water Mitigation Plan Development Planning Change Sheet, dated January 25, 2000, retrieved from www.swrcb.ca.gov/rwqcb4/water_issues/programs/stormwater/susmp/susmp_changesheet2.pdf)

IB Sampling	Date	Stanislaus @ Don Pedro - DNP (precipitation in inches)	Stanislaus @ Orange Blossom - OBB (flow in cfs)	Tuolumne @ New Melones Dam - NML (precipitation in inches)	Tuolumne @ La Grange - LGN (flow in cfs)	Merced R @ Exchequer Dam - EXC (precipitation in inches)	Merced Nr Snelling - MSN (flow in cfs)
		Daily Volumes					
	10/17/2003	0.00	259.00	0.00	462.00	0.00	378
	10/18/2003	0.00	260.00	0.00	467.00	0.00	531
	10/19/2003	0.00	256.00	0.00	465.00	0.00	649
10/21/2003	10/20/2003	0.00	606.00	0.00	456.00	0.00	626
10/22/2003	10/21/2003	0.00	762.00	0.00	368.00	0.00	627
10/23/2003	10/22/2003	0.00	743.00	0.00	368.00	0.00	636
	10/23/2003	0.00	740.00	0.00	369.00	0.00	550
	10/24/2003	0.00	741.00	0.00	371.00	0.00	418
	10/25/2003	0.00	741.00	0.00	371.00	0.00	330
	10/26/2003	0.00	742.00	0.00	263.00	0.00	280
	10/27/2003	0.00	739.00	0.00	270.00	0.00	278
	10/28/2003	0.00	740.00	0.00	275.00	0.00	284
10/30/2003	10/29/2003	0.00	722.00	0.00	278.00	0.00	270
	10/30/2003	0.00	447.00	0.00	276.00	0.00	245
	10/31/2003	0.02	286.00	0.00	229.00	0.02	249
	11/1/2003	0.00	270.00	**0.27**	231.00	0.00	257
	11/2/2003	**0.26**	271.00	0.00	244.00	**0.25**	253
11/4/2003	11/3/2003	0.00	271.00	**0.28**	244.00	0.05	256
11/5/2003	11/4/2003	0.00	264.00	**0.10**	238.00	0.00	258
11/6/2003	11/5/2003	0.00	263.00	0.02	240.00	0.00	258
	11/6/2003	0.00	265.00	0.00	241.00	**0.12**	257
	11/7/2003	0.00	264.00	**0.22**	253.00	0.01	259
	11/8/2003	0.00	265.00	0.00	226.00	**0.90**	259
	11/9/2003	0.00	269.00	**0.75**	226.00	**0.20**	265
	11/10/2003	**0.36**	266.00	0.05	226.00	0.00	260
	11/11/2003	0.00	267.00	0.00	225.00	0.00	254
	11/12/2003	0.00	274.00	0.00	222.00	0.01	244
	11/13/2003	0.00	277.00	0.00	225.00	0.00	247
	11/14/2003	0.00	275.00	0.00	223.00	**0.18**	242
	11/15/2003	**0.12**	269.00	**0.34**	223.00	0.03	234
11/17/2003	11/16/2003	0.02	270.00	**0.11**	220.00	0.00	233
	11/17/2003	0.02	272.00	0.02	217.00	0.02	236
11/19/2003	11/18/2003	0.00	289.00	0.02	217.00	0.00	241
11/20/2003	11/19/2003	0.00	300.00	0.01	217.00	0.00	252
	11/20/2003	0.00	303.00	0.00	218.00	0.00	252
	11/21/2003	0.00	305.00	0.00	219.00	0.00	250
	11/22/2003	0.00	305.00	0.00	223.00	0.00	251
	11/23/2003	0.00	308.00	0.00	214.00	0.00	253
	11/24/2003	0.00	314.00	0.00	215.00	0.00	252
	11/25/2003	0.00	317.00	0.00	209.00	0.00	251
	11/26/2003	0.00	319.00	0.00	209.00	0.00	253
	11/27/2003	0.00	319.00	0.00	210.00	0.00	253
	11/28/2003	0.00	319.00	0.00	237.00	0.00	254
	11/29/2003	0.00	319.00	0.00	221.00	0.00	254
	11/30/2003	0.00	0.00	0.00	219.00	0.01	254
	12/1/2003	0.00	0.00	0.00	219.00	0.01	253
	12/2/2003	0.00	0.00	**0.11**	223.00	0.00	245
	12/3/2003	0.00	0.00	0.01	219.00	0.00	248
	12/4/2003	0.00	329.00	0.00	218.00	**0.17**	248
	12/5/2003	0.08	334.00	**0.18**	220.00	**0.11**	250
	12/6/2003	**1.04**	334.00	**0.21**	221.00	**0.87**	249
	12/7/2003	0.00	332.00	**0.98**	222.00	0.00	251
	12/8/2003	0.00	325.00	0.02	219.00	0.00	249
	12/9/2003	**0.50**	325.00	0.00	221.00	**0.28**	251
	12/10/2003	**0.48**	305.00	**0.64**	222.00	**0.52**	256
	12/11/2003	0.01	231.00	**0.75**	221.00	0.03	280
	12/12/2003	**0.33**	227.00	**0.10**	227.00	**0.25**	285
	12/13/2003	**0.66**	227.00	**0.52**	224.00	**0.55**	289
	12/14/2003	0.01	228.00	**0.64**	221.00	**0.13**	299
	12/15/2003	0.00	227.00	**0.14**	217.00	0.00	291
	12/16/2003	0.00	225.00	0.00	214.00	0.00	282
	12/17/2003	0.00	224.00	0.02	214.00	0.00	274
	12/18/2003	0.00	248.00	0.00	216.00	0.00	261
	12/19/2003	0.00	265.00	0.00	211.00	**0.38**	252
	12/20/2003	**0.32**	265.00	**0.34**	214.00	0.00	258
	12/21/2003	0.03	262.00	0.08	214.00	0.00	254
	12/22/2003	0.00	262.00	0.01	211.00	0.00	249
	12/23/2003	0.00	262.00	0.00	215.00	**0.32**	250
	12/24/2003	0.00	264.00	**0.60**	215.00	0.00	253
	12/25/2003	**0.45**	288.00	**1.43**	213.00	**0.42**	259
	12/26/2003	**0.34**	298.00	**0.42**	211.00	0.00	256

Sampling Events

Bold Storm, using definition of a rainfall event that produces more than 0.1 inch of precipitation (Standard Urban Storm Water Mitigation Plan Development Planning Change Sheet, dated January 25, 2000, retrieved from www.swrcb.ca.gov/rwqcb4/water_issues/programs/stormwater/susmp/susmp_changesheet2.pdf)

IB Sampling	Date	Stanislaus @ Don Pedro - DNP (precipitation in inches)	Stanislaus @ Orange Blossom - OBB (flow in cfs)	Tuolumne @ New Melones Dam - NML (precipitation in inches)	Tuolumne @ La Grange - LGN (flow in cfs)	Merced R @ Exchequer Dam - EXC (precipitation in inches)	Merced Nr Snelling - MSN (flow in cfs)
		Daily Volumes					
	12/27/2003	0.00	276.00	0.01	213.00	0.00	253
	12/28/2003	0.00	270.00	0.00	212.00	0.00	252
	12/29/2003	0.00	269.00	0.01	212.00	**0.43**	258
	12/30/2003	0.00	278.00	**0.13**	210.00	0.01	263
	12/31/2003	0.01	277.00	0.03	208.00	**0.34**	256
	1/1/2004	**0.42**	362.00	**1.02**	211.00	**0.52**	283
	1/2/2004	**0.67**	274.00	**0.82**	213.00	0.09	268
	1/3/2004	**0.22**	247.00	**0.20**	215.00	0.00	265
	1/4/2004	0.00	230.00	0.02	215.00	0.00	255
1/6/2004	1/5/2004	0.00	221.00	0.01	212.00	0.00	255
1/7/2004	1/6/2004	0.00	0.00	0.00	212.00	0.00	252
1/8/2004	1/7/2004	0.01	0.00	0.03	210.00	0.00	252
	1/8/2004	0.00	0.00	0.03	211.00	0.00	252
	1/9/2004	0.00	0.00	0.00	212.00	0.00	256
	1/10/2004	0.00	0.00	0.00	212.00	0.00	256
	1/11/2004	0.00	0.00	0.00	213.00	0.00	256
	1/12/2004	0.00	0.00	0.00	213.00	0.00	254
	1/13/2004	0.00	0.00	0.00	212.00	0.00	245
	1/14/2004	0.00	0.00	0.01	214.00	0.00	236
	1/15/2004	0.00	0.00	0.00	220.00	0.00	236
	1/16/2004	0.00	0.00	0.00	214.00	0.00	236
	1/17/2004	0.00	0.00	0.00	213.00	0.00	237
	1/18/2004	0.00	0.00	0.00	210.00	0.00	236
1/20/2004	1/19/2004	0.00	0.00	0.00	210.00	0.00	236
	1/20/2004	0.00	0.00	0.00	212.00	0.00	236
	1/21/2004	0.00	0.00	0.00	213.00	0.00	236
	1/22/2004	0.00	0.00	0.00	212.00	0.00	236
	1/23/2004	0.00	0.00	0.00	212.00	0.03	236
	1/24/2004	0.00	0.00	**0.12**	211.00	0.00	236
	1/25/2004	0.00	0.00	0.02	212.00	0.00	236
	1/26/2004	0.00	0.00	0.00	213.00	0.00	236
1/28/2004	1/27/2004	0.01	242.00	0.01	215.00	**0.74**	238
1/29/2004	1/28/2004	**0.37**	242.00	**0.51**	215.00	0.00	242
	1/29/2004	0.00	246.00	0.00	215.00	0.00	234
	1/30/2004	0.00	245.00	0.00	214.00	0.00	235
	1/31/2004	0.00	246.00	0.01	213.00	0.00	236
	2/1/2004	0.00	240.00	0.00	214.00	0.00	235
	2/2/2004	0.00	244.00	0.02	213.00	**0.79**	247
2/4/2004	2/3/2004	**0.68**	286.00	**0.96**	213.00	0.09	249
	2/4/2004	0.10	267.00	**0.15**	211.00	0.00	242
	2/5/2004	0.00	248.00	0.00	211.00	0.00	243
	2/6/2004	0.00	243.00	0.00	210.00	0.01	242
	2/7/2004	0.00	256.00	0.09	213.00	0.00	241
	2/8/2004	0.00	295.00	0.00	209.00	0.00	242
	2/9/2004	0.00	326.00	0.00	210.00	0.00	243
	2/10/2004	0.00	329.00	0.00	211.00	0.00	249
	2/11/2004	0.00	343.00	0.00	210.00	0.00	253
	2/12/2004	0.00	397.00	0.00	209.00	0.00	255
	2/13/2004	0.00	399.00	0.00	209.00	0.00	255
	2/14/2004	0.00	401.00	0.00	209.00	0.00	256
	2/15/2004	0.00	399.00	0.00	209.00	**0.10**	257
	2/16/2004	0.00	402.00	**0.20**	208.00	**0.26**	260
2/18/2004	2/17/2004	0.00	403.00	**0.44**	208.00	**0.52**	258
	2/18/2004	0.00	484.00	**0.97**	209.00	**0.30**	293
	2/19/2004	0.00	431.00	**0.23**	208.00	0.00	271
	2/20/2004	0.00	412.00	0.00	207.00	0.04	267
	2/21/2004	0.00	410.00	0.04	207.00	**0.20**	262
	2/22/2004	0.00	408.00	**0.12**	208.00	0.05	263
2/24/2004	2/23/2004	0.00	403.00	0.08	208.00	0.01	261
	2/24/2004	0.00	348.00	0.04	208.00	0.00	260
2/26/2004	2/25/2004	0.00	323.00	**0.25**	208.00	**1.18**	284
	2/26/2004	**1.23**	520.00	**1.58**	208.00	**0.55**	353
	2/27/2004	0.00	385.00	**0.39**	208.00	0.00	309
	2/28/2004	0.00	326.00	0.05	206.00	0.00	273
	2/29/2004	0.00	311.00	0.00	222.00	0.00	268
	3/1/2004	0.00	306.00	0.01	233.00	**0.51**	269
3/3/2004	3/2/2004	0.00	326.00	**0.15**	246.00	0.00	276
	3/3/2004	0.01	310.00	0.00	435.00	0.00	253
	3/4/2004	0.00	303.00	0.00	547.00	0.00	251
	3/5/2004	0.00	300.00	0.00	557.00	0.00	249
	3/6/2004	0.00	299.00	0.00	940.00	0.00	248
	3/7/2004	0.00	299.00	0.00	1122.00	0.00	247

Sampling Events

Bold Storm, using definition of a rainfall event that produces more than 0.1 inch of precipitation (Standard Urban Storm Water Mitigation Plan Development Planning Change Sheet, dated January 25, 2000, retrieved from www.swrcb.ca.gov/rwqcb4/water_issues/programs/stormwater/susmp/susmp_changesheet2.pdf)

IB Sampling	Date	Stanislaus @ Don Pedro - DNP (precipitation in inches)	Stanislaus @ Orange Blossom - OBB (flow in cfs)	Tuolumne @ New Melones Dam - NML (precipitation in inches)	Tuolumne @ La Grange - LGN (flow in cfs)	Merced R @ Exchequer Dam - EXC (precipitation in inches)	Merced Nr Snelling - MSN (flow in cfs)
				Daily Volumes			
	3/8/2004	0.00	296.00	0.00	1123.00	0.00	247
	3/9/2004	0.00	297.00	0.00	1110.00	0.00	246
	3/10/2004	0.00	292.00	0.00	1100.00	0.00	246
	3/11/2004	0.00	293.00	0.00	1113.00	0.00	240
	3/12/2004	0.00	298.00	0.00	1098.00	0.00	236
	3/13/2004	0.00	293.00	0.00	1102.00	0.00	237
	3/14/2004	0.00	295.00	0.00	1108.00	0.00	236
	3/15/2004	0.00	292.00	0.00	1107.00	0.00	233
3/17/2004	3/16/2004	0.00	291.00	0.00	1120.00	0.00	230
	3/17/2004	0.00	296.00	0.00	2945.00	0.00	232
	3/18/2004	0.00	294.00	0.00	3020.00	0.00	238
	3/19/2004	0.00	286.00	0.00	3030.00	0.00	249
	3/20/2004	0.00	290.00	0.00	2354.00	0.00	254
	3/21/2004	0.00	294.00	0.00	1766.00	0.00	256
	3/22/2004	0.00	293.00	0.00	1342.00	0.00	256
3/24/2004	3/23/2004	0.00	304.00	0.00	1021.00	0.00	264
	3/24/2004	0.00	294.00	0.00	833.00	0.00	266
	3/25/2004	0.00	265.00	0.00	711.00	**0.59**	257
	3/26/2004	0.00	258.00	**0.88**	608.00	0.00	248
	3/27/2004	0.00	251.00	0.00	562.00	0.00	246
	3/28/2004	0.00	250.00	0.00	562.00	0.00	250
	3/29/2004	0.00	248.00	0.00	563.00	0.00	251
	3/30/2004	0.00	247.00	0.00	567.00	0.00	254
	3/31/2004	0.00	249.00	0.00	924.00	0.00	245
	4/1/2004	0.00	261.00	0.00	1099.00	0.00	240
	4/2/2004	0.00	268.00	0.00	1079.00	0.00	230
	4/3/2004	0.00	269.00	0.00	1093.00	0.00	241
	4/4/2004	0.00	269.00	0.00	1090.00	0.00	236
	4/5/2004	0.00	273.00	0.00	964.00	0.00	230
	4/6/2004	0.00	268.00	0.00	810.00	0.00	236
	4/7/2004	0.00	271.00	0.00	826.00	0.00	234
	4/8/2004	0.00	270.00	0.00	825.00	0.00	232
	4/9/2004	0.00	271.00	0.00	812.00	0.00	234
	4/10/2004	0.00	270.00	0.00	808.00	0.00	238
	4/11/2004	0.00	270.00	0.00	805.00	0.00	362
	4/12/2004	0.00	272.00	0.00	809.00	0.00	545
	4/13/2004	0.00	322.00	0.00	1059.00	0.00	495
	4/14/2004	0.00	429.00	0.00	1382.00	0.00	510
	4/15/2004	0.00	434.00	0.00	1378.00	0.00	501
	4/16/2004	0.00	432.00	0.00	1403.00	0.00	490
	4/17/2004	0.00	432.00	0.00	1442.00	0.03	512
	4/18/2004	0.00	431.00	0.00	1438.00	0.00	536
	4/19/2004	0.00	432.00	0.00	1424.00	0.00	545
	4/20/2004	0.00	431.00	0.04	1428.00	0.00	561
	4/21/2004	0.00	476.00	0.04	1442.00	0.00	575
	4/22/2004	0.00	628.00	0.00	1262.00	0.00	635
	4/23/2004	0.00	830.00	0.00	977.00	0.00	834
	4/24/2004	0.00	947.00	0.00	702.00	0.00	980
	4/25/2004	0.00	967.00	0.00	628.00	0.00	970
	4/26/2004	0.00	967.00	0.00	638.00	0.00	944
4/28/2004	4/27/2004	0.00	968.00	0.00	643.00	0.00	936
4/29/2004	4/28/2004	0.00	1081.00	0.00	635.00	0.00	926
	4/29/2004	0.00	1088.00	0.00	626.00	0.00	970
	4/30/2004	0.00	1089.00	0.00	627.00	0.00	1121
				Monthly Averages			
	Jan-03	0.00	339.39	0.04	181.94	0.00	186.9355
	Feb-03	0.00	480.32	0.07	240.57	0.00	228.7143
	Mar-03	0.00	458.19	0.06	179.06	0.00	235.7097
	Apr-03	**0.13**	734.60	**0.20**	651.50	**0.15**	514.1333
	May-03	0.03	784.77	0.03	475.58	0.06	684.7419
	Jun-03	0.00	1173.93	0.00	232.27	0.00	245.6000
	Jul-03	0.00	463.90	0.00	241.32	0.00	220.9032
	Aug-03	0.00	334.10	0.02	286.13	0.01	184.0645
	Sep-03	0.00	279.73	0.00	230.47	0.00	139.6000
	Oct-03	0.00	415.13	0.00	290.52	0.00	299.8387
	Nov-03	0.03	276.30	0.07	225.07	0.06	251.4000
	Dec-03	**0.14**	247.00	**0.24**	216.68	**0.16**	260.4516
	Jan-04	0.05	82.42	0.09	212.87	0.04	245.2581
	Feb-04	0.07	353.07	**0.19**	209.79	**0.14**	261.7586
	Mar-04	0.00	287.39	0.03	1124.81	0.04	248.7097
	Apr-04	0.00	520.53	0.00	1005.13	0.00	543.3000

Sampling Events

Bold Storm, using definition of a rainfall event that produces more than 0.1 inch of precipitation (Standard Urban Storm Water Mitigation Plan Development Planning Change Sheet, dated January 25, 2000, retrieved from www.swrcb.ca.gov/rwqcb4/water_issues/programs/stormwater/susmp/susmp_changesheet2.pdf)

Appendix I:
Draft Report Comments and Response

Two review periods were held to receive comments on this report. In February 2010, agencies and local stakeholders who had provided input to the program design, were active participants in the Eastside Basin, and/or who had allowed access for sampling were notified of the availability of this report for pre-draft comment. Forty three individuals were included on the mailing list. Comments were received from Turlock Irrigation District and the SWAMP peer review.

In April 2010, a public review period was conducted. Fifty eight individuals were notified of availability of this report for public comment. No comments were received.

SWAMP Monitoring Plan or Research Proposal REVIEW Sheet

Title/Version: _ **San Joaquin River Basin Rotational Sub-basin Monitoring: Eastside Basin, January 2003 - April 2004 (Stanislaus, Tuolumne, and Merced River Watersheds and Farmington and Valley Floor Drainage Areas**_

Author & Affiliation: _ Central Valley Regional Water Quality Control Board

Reviewed By:

Review Date: __March 12, 2010_

GENERAL GUIDELINE FOR EVALUATING PROPOSALS

- Does the background provide sufficient information to understand the problem?
- Are monitoring objectives clearly defined?
- Is the monitoring/research question(s) clearly formulated?
- Is the monitoring design appropriate to answer the question?
- Are the data appropriate to answer the question?
- Are the data collection methods appropriate?
- Are the data analysis methods appropriate to analyze the data and interpret results?

REVIEWERS' RECOMMENDATION

Recommend to approve as is	X
Recommend to approve with minor changes	
Recommend to approve with major changes	
Do not recommend to approve	

Report Evaluation

Does the background provide sufficient information to understand the problem?

Yes, Section 2 (the introduction) provides a nicely detailed background for the study and relates it to the objectives of the project. Section, by way of providing details of the watershed and drainage areas and their descriptions also provides more background information.

Are monitoring objectives clearly defined?

Yes, the monitoring objectives are clearly defined at first in the fact sheet and then again in the Introduction to the report. A good feature of the report is that these same objectives are repeated at the start of the discussion and result sections too. This serves to keep the reader focused on the objectives throughout reading the sometimes long and complex narratives.

Is the monitoring/research question(s) clearly formulated?

Yes, the questions are clearly formulated in the beginning and again throughout the report.

Is the monitoring design appropriate to answer the question?

Yes, the parameters that were chosen are typical of the kinds of analyses that will answer questions about the quality of fresh water in watersheds and drainage areas. Later studies may find that they need to add analysis methods for specific organic compounds that are suspected of causing pollution. Coordinated future monitoring with other stakeholder programs will also strengthen future monitoring efforts.

Are the data appropriate to answer the question?

There is a huge amount of data in this report and it is nicely summarized in tables and figures. The data is appropriate for the authors to be able to answer the questions of both the short term and the longer term trends of pollution in the watersheds and drainage areas being monitored.

Are the data collection methods appropriate?

The sampling methods which supported data collection were detailed in Section 4.4 and the methods are appropriate for the parameters used in this study.

Are the data analysis methods appropriate to analyze the data and interpret results?

Yes, the data analysis methods focused on spatial and temporal trends plus some additional interbasin comparisons. These kinds of analyses were appropriate for the objectives of the study and for answering the questions set forth.

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February 26, 2010

Catherine Gill
Central Valley Regional Water Quality Control Board
San Joaquin Watershed Unit
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

Dear Catherine:

RE: Preliminary Draft San Joaquin River Basin Rotational Sub-basin Monitoring: Eastside Basin, January 2003-April 2004.

Turlock Irrigation District (TID) appreciates the opportunity to comment on the Preliminary Draft of the San Joaquin River Basin Rotational Sub-basin Monitoring: Eastside Basin, January 2003-April 2004. Our comments center on factual inaccuracies that may cause incorrect conclusions. Our comments are as follows:

- *Section 3.3 Eastside Basin, Tuolumne River.* The second paragraph states that the river flows through the Stanislaus National Forest valley. The word "valley" needs to be removed.
- *Section 3.3 Eastside Basin, Tuolumne River.* The second paragraph states that New Don Pedro Dam and La Grange Dam were constructed by the combined efforts of Modesto ID (MID), TID the City and County of San Francisco. New Don Pedro Dam was constructed by the combined efforts of all three agencies, however La Grange Dam was constructed by MID and TID only.
- *Section 3.3 Eastside Basin, Valley Floor Drainage Area.* The second paragraph states that flows within this area are largely controlled by MID and TID. However, MID only covers the area between the Stanislaus and Tuolumne rivers and TID only covers the area between the Tuolumne and Merced rivers. Merced ID covers the area south of the Merced River. Additionally, Oakdale Irrigation District covers the area east of MID between the Stanislaus River and Dry Creek.
- *Section 3.3 Eastside Basin, Valley Floor Drainage Area.* The fifth paragraph describes the "TID drainage system" as carrying both urban and agricultural supply and drainage. However the purpose of the TID system is to deliver irrigation supply. It also happens to carry some drainage. TID's canal system does not convey water for municipal purposes with the exception of the first 1.6 miles of the canal above the Stanislaus County community of La Grange (upstream of Turlock Lake). Flows in that stretch of the Upper Main Canal consist entirely of high quality Tuolumne River water. There are no other municipal uses of TID canal water, nor are there plans to use the canal for that purpose.

The following comments were submitted by Turlock Irrigation District. Responses and modifications to the report are included:

- ***Section 3.3 Eastside Basin, Tuolumne River***. The second paragraph states that the river flows through the Stanislaus National Forest valley. The work "Valley" needs to be removed. &
- ***Section 3.3 Eastside Basin, Tuolumne River***. The second paragraph states that New Don Pedro Dam and La Grange Dam were constructed by the combined efforts of Modesto ID (MID), TID the City and County of San Francisco. New Don Pedro Dam was constructed by the combined efforts of all three agencies, however La Grange Dam was constructed by MID and TID only.
  - ~~o~~Revised to read:
  - ~~o~~The remaining river flows downstream through the Stanislaus National Forest ~~valley~~ and into Don Pedro Reservoir. Below the reservoir, flows in the lower Tuolumne are controlled primarily by the operation of New Don Pedro Dam ~~and La Grange Dam~~, constructed by the combined efforts of Modesto Irrigation District (MID), Turlock Irrigation District ~~and~~ (TID), and from the City and County of San Francisco, and La Grange Dam, constructed by MID and TID. The dams allow water to be diverted to the Modesto Main Canal to the north and the Turlock Main Canal to the south downstream of New Don Pedro Dam and La Grange Dam. The Tuolumne River drains about 1,540 square miles and has an average annual unimpaired runoff of about 1.8 million-acre feet. Many oak trees and riparian forests are found along the Tuolumne River. Communities along the River include Empire, La Grange, Waterford, and Modesto with populations in unincorporated areas ranging from less than 1000 people to an estimated 210,088 in Modesto by 2009 (DOF, 2009a). On September 28, 1984, the Tuolumne River, from the source to the Don Pedro Reservoir was granted Wild and Scenic designation, which placed limitations on uses for the 83 miles of river that was covered.

- ***Section 3.3 Eastside Basin, Valley Floor Drainage Area***. The second paragraph states that flows within this area are largely controlled by MID and TID. However, MID only covers the area between the Stanislaus and Tuolumne rivers and TID only covers the area between the Tuolumne and Merced rivers. Merced ID covers the area south of the Merced River. Additionally, Oakdale Irrigation District covers the area east of MID between the Stanislaus River and Dry Creek.
  - ~~o~~Revised to read:
  - In large part, area flows are dominated by the supply and drainage systems of the local irrigation districts:

- Modesto Irrigation District (MID) covers the area between the Stanislaus and Tuolumne rivers;
- Turlock Irrigation District (TID) covers the area between the Tuolumne and Merced rivers;
- The Merced Irrigation District (MeID) covers the area south of the Merced river;
- The Oakdale Irrigation District (OID) covers the area east of MID, between the Stanislaus River and Dry Creek.

o For this study, sites were generally chosen that drained directly to the San Joaquin River. Supply water for the districts primarily comes from the Tuolumne River with groundwater providing a secondary source. The laterals provide supply water to the district and may receive some recycled drainage. Discharge from the laterals is dominated by operational spill. Drainage from the area can include irrigated agriculture surface and subsurface drainage, urban, storm runoff, and runoff from land used for grazing and confined animal facilities.

- ***Section 3.3 Eastside Basin, Valley Floor Drainage Area.*** The fifth paragraph describes the "TID drainage system" as carrying both urban and agricultural supply and drainage. However, the purpose of the TID system is to deliver irrigation supply. It also happens to carry some drainage. TID's canal system does not convey water for municipal purposes with the exception of the first 1.6 miles of the canal above the Stanislaus County community of La Grange (upstream of Turlock Lake). Flows in that stretch of the Upper Main Canal consist entirely of high quality Tuolumne River water. There are no other municipal uses of TID canal water, nor are there plans to use the canal for that purpose.
  - ~~o~~Revised to read:
  - ~~o~~The TID drainage system, which primarily delivers irrigation supply and may carry some agricultural drainage~~carries both urban and agricultural supply and drainage~~, lies between the lower reaches of the Tuolumne and Merced River watersheds. The TID contains 250 miles of canals and laterals (of which 80% are concrete lined) as well as 1800 miles of improvement district ditches and pipelines. TID serves/drains 149,500 acres of irrigated acreage. The TID's Main Canal~~, which transports TID's irrigation water,~~ originates at La Grange Dam and carries municipal supply for 1.6 miles to the community of La Grange. Flows in this stretch of the Upper Main canal consist entirely of high quality Tuolumne river water. The canal continues past La Grange to the Turlock Lake reservoir~~and is stored temporarily in Turlock Lake~~. From there, the Main Canal continues its westerly course towards Hickman. The Highline

Canal branches off the Main Canal approximately 3 miles east of Hickman and serves the far eastern and southern portions of the District. At Hickman, the Main Canal is divided into the Ceres Main Canal and the Turlock Main Canal. From these two main canals stems a system of laterals, which flow in a westerly direction. These laterals drain into spills on the western edge of the TID.

- ***Section 4.3, Sampling Site, Table 1***. Site STC501 is labeled as TID Lateral 5 (Harding Drain). The correct designation for this site would be Harding Drain. Lateral 5 spills to the Ceres Main Canal which then spills to the Harding Drain.
  - ~~o~~Revised to read:
  - ~~o~~~~TID Lateral 5 (~~Harding Drain~~)~~

- ***Section 4***.3, ***Sampling Site, Table 1***. Site MER201 is labeled as TID Lateral 6&7 @ Central Ave. Technically, this site is the TID Lateral 6&7 Drain, into which TID Lateral 6 and TID Lateral 7 spill.
  - ~~o~~Revised to read:
  - ~~o~~TID Lat 6&7 Drain @ Central Ave.

- ***Section 5***.0, Precipitation and Flow, Figure 6. The graph key shows Stanislaus @ Don Pedro. This label should probably be Stanislaus @ New Melones. Additionally it is not clear what "ppt" is referring to. &
- ***Section 5***.0, Precipitation and Flow, Figure 7. The graph key shows Tuolumne @ New Melones. This label should probably be Tuolumne @ Don Pedro. Additionally, it is not clear what "ppt" is reffering to.
  - Figures and Data corrected. Abbreviation "ppt" spelled out to "precipitation"

- ***Section 6***.1, Applicable Beneficial Uses, Table 3. Table 3 shows existing beneficial uses of irrigation canals as warm water habitat and spawning, warm and cold water migration, and REC-1 and REC-2 recreation. TID feels these designations are inappropriate for irrigation canals for the following reasons:
  - ~~o~~The canals listed are manmade, concrete lined channels that are drained for portions of the year. They do not provide suitable aquatic habitat or spawning areas.
  - ~~o~~The canals are elevated above the rivers, and do not have connections that would enable the migration of aquatic life.
  - ~~o~~It is unsafe to swim or boat in canals and it is illegal to trespass on or swim in Turlock Irrigation District or Modesto Irrigation District canals. They therefore do not provide recreational beneficial uses.

  - ~~o~~Response:

- ~~o~~It is understood that there may be disagreement in beneficial uses assigned to a waterbody. However, until designations are officially adopted by the Central Valley Water Board and approved by USEPA, the tributary rule will continue to be evaluated on a case by case basis. Local stakeholders may state their differences to these descriptions through the public review period for this report. Comments will be included as an Appendix to this report.

- ~~o~~The following statement was added to 6.1:
  In cases where specific beneficial uses have not been designated for a particular water body, the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins allows the use for the "tributary rule" which applies beneficial uses of downstream water bodies to those not specifically designated. While the Regional Board generally does not use the tributary rule to determine beneficial uses for constructed agricultural drains and other non-stream tributaries, as noted in Board resolution R5-2005-0137 (October 2005), those beneficial uses were noted in the Eastside Report to provide a consistent framework to assess potential water quality impacts. In the case of the constructed facilities, those impacts would more likely be to downstream water bodies.

- ***Section 7.0, Table 10.*** The maximum total coliform value reported for STC215 is 0.242. This appears to be a typo and should probably be >2420, based on the reported median value.
  - ~~o~~Typo corrected

- ***Section 7.4, Tuolumne River Watershed, 2nd Paragraph*** – "The TOC concentrations at the other sites ranged from 45 NTU to 300 NTU." The results appear to be for maximum turbidity rather than TOC.
  - ~~o~~Revised to read:
  - ~~o~~~~Most data collected from~~Site STC210 – Tuolumne River at La Grange - is unique in that concentrations typically are the lowest reported for the watershed. If the concentration is not the lowest, such as maximum turbidity, TSS, and TOC, the concentration is similar to the lowest maximum concentration (ie., maximum turbidity at La Grange was 18 NTU, while the lowest maximum was 16 NTU at Audie Peeples). Similarly, the minimum and median TOC concentrations at La Grange were the lowest in the watershed (<1.0 and 1.6 mg/l, respectively), while the maximum concentration (2.5 mg/l) was close to the lowest maximum (2.1 mg/l at Tuolumne River at Mancini Park). The highest minimum temperature and

dissolved oxygen concentration also were observed at La Grange, resulting in the most stable results overall for these two constituents.

- ***Section 7.4, Tuolumne River Watershed, 4th Paragraph*** states that the lowest maximum DO concentration was at Sullivan Creek. However, Table 10 shows the lowest maximum DO was actually detected at Tuolumne River at La Grange.
  - ~~o~~Revised to Read:
  - ~~o~~Dissolved oxygen concentrations ranged from 6 mg/L at Dry Creek at La Loma Road to 16 mg/L at Curtis Creek at Algerine Road and Dry Creek at La Loma Road. The highest minimum, median, and maximum concentrations among the tributary sites were 9.14, 12.8, and 16.0 mg/L at Curtis Creek. Minimum and median DO concentrations were lowest at Dry Creek (6.0 and 8.6 mg/L), but the lowest maximum concentration was ~~15.1 mg/L at Sullivan Creek~~11.4 mg/L at Tuolumne River at La Grange.

- ***Section 7.5, Merced River Watershed, 7th Paragraph*** states that the minimum, median, and maximum TSS concentrations were 5.6, 10 and 16 mg/L. However, the concentrations shown in Table 12 are 5.6, 8.4, and 16 mg/L.
  - ~~o~~Revised to read:
  - ~~o~~The TSS minimum concentrations at all sites except Merced River at River Road were below reporting limits. All TSS data collected from Merced River at Merced Falls was below reporting limits. The minimum, median, and maximum concentration results were highest at Merced River at River Road (5.6, ~~10~~8.4, and 16 mg/L, respectively).

- ***Section 7.5, Merced River Watershed, 9th Paragraph*** states that the minimum Total Coliform concentrations were 344 and 345 MPN/100mL. However, these represent the highest minimum values. The true minimum value was 10 MPN/100mL at Merced River at Bagby.
  - ~~o~~Revised to read:
  - ~~o~~Total coliform minimum concentrations were highest in the lower watershed sites~~. Minimum concentrations were~~ (344 MPN/100ml at Merced River at River Road and 345 MPN/100 ml at Merced River at Highway 99).~~, while~~ Lower watershed median and maximum concentrations either neared or were above the reporting limit of 2420 MPN/100 ml. Maximum concentrations were also above reporting limits (>2420 MPN/100mL) at all sites except Merced River at Merced Falls. The overall lowest concentrations varied between Merced River at Bagby and Merced River at Merced Falls.

The lowest minimum concentration was 10 MPN/100 mL at Merced River at Bagby, while the lowest median and maximum concentrations were 633 and 2420 MPN/100 mL at Merced River at Merced Falls.

- ***Section 8.1.1, River Basin Sites, 1st Paragraph*** states that some major cities such as Modesto and Turlock can provide runoff to the lower watershed areas. While it is true that Modesto and Turlock can provide runoff, many of the smaller towns and unincorporated areas also produce storm water runoff that reaches the rivers through various means.
  - ~~o~~Revised to read:
  - ~~o~~Some major cities such as Modesto and Turlock, as well as many of the smaller towns and unincorporated areas, can provide runoff, particularly during storm events to the lower watershed areas. Both the Farmington Drainage Basin and the Valley Floor sub-basins exist in the lower watersheds and are dominated by irrigated agriculture.

- ***Section 8.1.1, River Basin Sites, Total Organic Carbon and Total Suspended Solids, 1st Paragraph*** states that the spike of TSS detected at the Tuolumne River sites in June 2003 may be related to the start of irrigation return flows entering the river. However, this conclusion is not supported by any presented data. It is unclear how the authors determined that irrigation return flows started entering the river system in June as irrigation season in this area generally starts in March. TID records show that irrigation season in 2003 started on March 6th. This conclusion should either be removed from the report or supported by data.
  - ~~o~~Revised to read:
  - ~~o~~Funding constraints limited collection of TOC and TSS data to March through June 2003. For the Tuolumne River main stem sites, although overall low medians were recorded (<1.0-mg/L and <4.0-mg/L, respectively), both constituent concentrations increased progressively downstream. Spikes in TSS but not TOC occurred at the furthest downstream site in April and again in June. The spike in April corresponds to a period of heavy rainfall and elevated flow, but the spike in June occurred during a dry period. Due to the limited data available and variety of local land uses, the source is not known for this spike. ~~although a period of increased flow due to releases from Don Pedro and also possibly the beginning of irrigation return flows entering the lower river stem.~~

- ***Section 8.2.1***. Throughout this section comparisons are made between the upper Tuolumne and Merced rivers through the use of “integrator sites”. The integrator sites for the Tuolumne were Woods and Sullivan Creeks

while the integrator site for the Merced was the Merced River at Bagby. Woods and Sullivan Creeks are small streams with low flows and urban influences, while the Merced River at Bagby is a main stem river with large flows and little urban influence. Comparisons cannot be drawn between these two types of streams. Additionally, while Woods and Sullivan Creeks contribute flow the Tuolumne River watershed, it should be made clear that these sites do not represent the water quality of the Tuolumne River.

- ~~o~~Revised to Read:

  In an attempt to characterize water quality draining from the upper and lower watersheds, "integrator" sites were identified. Integrator sites are located near discharge points of large watersheds that are characterized by heterogeneous land uses and are used to characterize the cumulative contribution of contaminants from the target watershed. In making such a comparison, we do recognize that there are different land uses and flow patterns in each of the watersheds.

- ~~o~~In the upper watersheds, sites were initially chosen along the main stem of each river. However, safety and logistical concerns resulted in ~~There were no upper watershed integrator sites monitored in the Stanislaus watershed due to safety concerns and access issues.~~the sampling site in the upper Stanislaus River to be dropped with no replacement. Additionally, the upper Tuolumne River sampling site had to be dropped, but two sites along small streams with low flows and urban influences remained. The Merced River sampling site was only slightly modified, but always remained on the main stem. Upper watershed sites in the Tuolumne and Merced Watersheds are integrator sites that were monitored at least quarterly. Possible influences to water quality in the upper Tuolumne watershed include the communities of Sonora, Soulsby and Twain Harte, as well as grazing, wildlife, and timber harvest activities. In the upper Merced watershed, communities with potential to influence water quality are smaller and further upstream than in the upper Tuolumne watershed. Water quality at this site is more likely influenced by management of National Forest land.

- ***Section 8.2.2, 4th paragraph***. This paragraph states that the laterals of MID and TID are dominated by operational spill but may be influenced by a mixture of Tuolumne River water, groundwater, agricultural tailwater, and urban storm runoff. It appears that there is some confusion as to the make up of operational spill water. Operational spill water is undelivered irrigation water that makes it to the terminal ends of the laterals. This irrigation water is made up of Tuolumne River water, groundwater and

lesser amounts of agricultural tailwater and urban runoff. Operation spill water is not a separate "Type" of water as may be concluded from the original wording of this paragraph.

- ~~o~~Revised to read:
- ~~o~~The Valley Floor discharges are a combination of drains and laterals from the Modesto Irrigation District and Turlock Irrigation District. The drain sites (MID Main Drain at Shoemake Road, and Harding Drain at Carpenter Road) are dominated by agricultural tailwater but may be seasonally influenced by urban storm runoff and wastewater. The lateral sites (MID Laterals 6/8 at Dunn Road, MID Laterals ¾ at Paradise Road, TID Lower Lateral 2, and TID Lateral 7 at Central Avenue) are dominated by operational spills, undelivered irrigation water that makes it to the terminal ends of the laterals that may consist of ~~but may be influenced by~~ a mixture of Tuolumne River water, ground water, and lesser amounts of agricultural tailwater~~,~~ and urban storm runoff.

- ***Section 8.2.2, Figures 72 through 80***. The text of this section describes Littlejohns Creek and Tuolumne River at La Grange as source water for the Valley Floor Area. However the related figures show Littlejohns Creek at "Background". This may cause confusion to the reader and "Source" should be shown on the figures.
  - ~~o~~Both sites will be identified as "Background" on the figures
  - ~~o~~Revised to read:
  - ~~o~~Sites discussed within this section are located in the lower elevations of the basin (below 250-feet) and eventually discharge directly to the San Joaquin River, rather than to the Stanislaus, Tuolumne, or Merced Rivers, with the exception of MID Lateral 6/8, which drains to the Stanislaus River. Two sub-basins were identified below 250 feet for this evaluation: the Farmington Drainage Area and the Valley Floor Drainage Area. The Valley Floor was further divided into drains and supply laterals. Descriptions of each of these sub-basins can be found in Section 3.0 Study Area. Table14 groups the sites by ~~source~~ background water and direct discharge to the San Joaquin River (or Stanislaus River as in the case of MID Lateral 6/8).
  - ~~o~~
  - ~~oSource~~ Background sites that have been included for comparison are the furthest upstream sites in each sub-basin that were included in this study. Detailed water quality at these sites was addressed in section 3.2. The Tuolumne River is the source for the majority of the Valley Floor Drainage Area, while Littlejohns Creek at Sonora Road may not be the primary source for Littlejohns Creek at Austin Road. However, both sites characterize water quality in their

respective upper watersheds. Therefore, Littlejohns Creek at Sonora Road and Tuolumne River at La Grange will be discussed as background water quality.

- Two sites represent the Farmington Drainage Basin: Littlejohn's Creek represents background water quality and French Camp Slough represents drainage to the SJR.
- French Camp Slough at Airport Way, an agriculturally dominated and partially reconstructed water body, was the furthest downstream site in the Farmington Flood Control Basin before discharging to the SJR. The Farmington area was first developed as a flood control measure to protect the Stockton area. Channels in this area also carry agricultural tailwater, and urban wastewater. Since the mid 1990s, the area has also been studied for its potential for groundwater recharge. Currently there are no groundwater recharge facilities in the area included in this study.
- The Valley Floor discharges are a combination of drains and laterals from the Modesto Irrigation District and Turlock Irrigation District. The drain sites (MID Main Drain at Shoemake Road, and Harding Drain at Carpenter Road) are dominated by agricultural tailwater but may be seasonally influenced by urban storm runoff and wastewater. The lateral sites (MID Laterals 6/8 at Dunn Road, MID Laterals ¾ at Paradise Road, TID Lower Lateral 2, and TID Lateral 7 at Central Avenue) are dominated by operational spills, undelivered irrigation water that makes it to the terminal ends of the laterals that may consist of a mixture of Tuolumne River water, ground water, and lesser amounts of agricultural tailwater and urban storm runoff.

- ***Section 8.3.2***. Discussions of Dry Creek within this section, and others throughout the report, characterize Dry Creek as agriculturally dominated. While this may be true from a gross acreage standpoint it ignores the influence of urban runoff. The City of Modesto has several storm drain outlets that discharge directly into Dry Creek. Information from the City's storm water permit should be reviewed and compared to the data collected for this project.
  - Revised to read:
  - 8. 3.2 Potential Impact of an Agriculturally Dominated Subwatershed (Dry Creek) on the Tuolumne River
  - Dry Creek is the main tributary of the Tuolumne River downstream of Don Pedro Reservoir, and drains a largely agricultural watershed of approximately 192 square miles with some storm drain outlets from

the City of Modesto~~an~~ (estimated population of 210,088 (DOF, 2009a)) ~~in the City of Modesto~~ at its confluence with the Tuolumne River ~~(DOF, 2009a)~~. This watershed contains large cattle grazing areas, orchards, and other irrigated agriculture directly adjacent to the waterway. Dry Creek has also been identified as a major contributor of fine sediment to the Tuolumne River (EDAW, 2001). This creek has carried tremendous winter flood flows in the past and has been extensively rechannelized and leveed along its lower 12-mile reach as it passes through the City of Modesto before discharging to the Tuolumne River. The water quality in the Tuolumne River can become visibly impaired by Dry Creek's muddy effluent below the confluence (EDAW, 2001), although this condition did not occur during this study period. Information from a combination of flow data from Tuolumne River at La Grange, Dry Creek at Clause Road, and Tuolumne River at 9th Street Bridge, indicate that flow from Dry Creek may at times come to a stop, or even allow the Tuolumne River to backflow up the Dry Creek channel, provided the ratio of Tuolumne River flow to Dry Creek flow is high enough. Backflow did not occur during the period of this study.

~~o~~

~~o~~EPA Envirofacts identified 768 facilities within the Modesto city limits. While there were no facilities with permits to discharge waste to water between the sampling sites included in this study, there were a number of other facilities, such as hazardous waste generators, located between the sampling sites, and facilities permitted to discharge stormwater could be found upstream and downstream of this study area (see Figure 87). In addition, the City of Modesto storm drain system includes approximately 30 outfalls to Dry Creek, with approximately 18 downstream of the sampling site. Approximately 13 stormwater outfalls are located on the Tuolumne River between the Legion Park and Audie Peeples sampling sites (Waste Discharge Requirement, NPDES No. CAS083526, Order No. R5-2008-0092). Surface water discharges occur generally in the older areas of the City or those areas immediately adjacent to the Tuolumne River, Dry Creek or irrigation canals, primarily during storm events and may receive other urban flows. Twenty percent of the City's storm water discharges directly into either the Tuolumne River or Dry Creek, with the rest discharging to detention/retention basins, MID laterals/drains, and rock wells. No discharger violations located between the sites for this study were identified during the period of this study.

- ***Section 8.3.2, Paragraph 9***. This paragraph indicates that the irrigation season is May through September. Typically irrigation seasons in this area are March through October. Turlock Irrigation District records show that in 2003 the TID irrigation season ran from 3/6/3 through 10/22/03 and in 2004 the irrigation season ran from 3/11/04 through 10/20/04.
  - ~~o~~Revised to read:
  - ~~o~~Turbidity results were significantly different upstream and downstream of the Dry Creek confluence in about half the sample sets (12 out of 25), typically with increased concentrations at the downstream site. Most results were also significantly different between Dry Creek and both the upstream (21 out of 24) and downstream (22 out of 25) sites, with concentrations generally higher in Dry Creek. Overall, concentrations were higher downstream of the confluence, however ~~during the irrigation season,~~ from May through September, the later portion of the Turlock Irrigation District irrigation season, upstream concentrations were occasionally higher. Turbidity was generally higher in Dry Creek than in the Tuolumne River.
  - ~~o~~
- ***Section 8.4***, ***E. coli.*** The paragraph states that based on the findings of E. coli in 99% of the samples, water from the Eastside basin should be treated fro pathogens prior to drinking water use. This is a moot point as the EPA Surface Water Treatment Rule requires disinfection (treatment for all surface water that will be utilized for municipal purposes.
  - ~~o~~We do agree that for agencies and others who are familiar with Drinking Water Regulations and Policies and who provide public water systems that this statement may not be necessary. However, this report is also being made available to the general public who may not be familiar with these Regulations and Policies.
  - ~~o~~Revised to read:
  - ~~o~~***E. coli*** was monitored as a pathogen indicator. For drinking water, pathogen criteria are typically set at the tap and are recommended at zero. No specific numeric criteria exist for source water. ***E. coli*** was detected in 99% of bacteria samples analyzed. Median concentrations in the Drainage Areas ranged from 25 MPN/100 mL to above reporting limits (>2420 MPN/100ml), while medians from the watershed sites ranged from 2 – 461 MPN/100 mL. Based on the findings, water from the Eastside basin should be treated for pathogens prior to drinking water use, as required by the EPA Surface Water Treatment Rule, which requires public water systems that use surface water or groundwater under the direct influence of surface water and serve at least 10,000 people to disinfection water that will be used for municipal purposes.

- ***Section 8.4, Drinking Water Summary, 1st Paragraph***. The paragraph states that the presence of E. coli in most samples indicates possible presence of pathogens and a requirement of treatment prior to use for municipal supply. Again, surface waters must be treated before use for municipal supply.
  - ~~o~~Revised to read:
  - ~~o~~Overall, water quality in the Eastside basin generally met municipal and domestic supply objectives or goals. All samples collected in the Eastside Basin were within the recommended limit for short term exposure for specific conductance. Trace elements were generally within water quality goals and objectives, with specific sites having high concentrations of certain elements, such as Woods Creek having high concentrations of cadmium at Mill Villa Drive. The high percent of elevated TOC concentrations (35% of samples collected) makes TOC the highest potential drinking water concern in the Eastside Basin, especially in the drainage areas and lower watershed tributaries. ***E. coli*** presence in most samples analyzed indicates possible presence of pathogens and a requirement of treatment prior to use for municipal supply, a requirement per the EPA Surface Water Treatment Rule.

- ***Section 8.4, Aquatic Life (pH, Temperature, Dissolved Oxygen, Turbidity, Water Column Toxicity and Trace Elements).*** The comparison of the sample results from man-made irrigation canals to water quality objectives or targets meant to protect aquatic life beneficial uses is inappropriate. The canals from which samples were collected in this study are man-made, concrete lined and rained of water for part of the year. They are not suitable habitat for aquatic life.
  - ~~o~~See response to section 6.1 comment.

- ***Section 8.4, Irrigation Water Supply (Salt represented by SC) and Section 9.0, Irrigation (Salt represented by SC)***. Specific conductivity results were compared to the Water Quality Goal for Agriculture (700 umhos/cm). The 700 umhos/cm goal is based on sensitivity of beans to salinity. While this is a commonly used value, it is inappropriate for this area of the valley as beans are not a crop of significance in this growing region.
  - ~~o~~Response:
  - ~~o~~It is understood that the water quality goal for agriculture (700 umhos/cm) protects the most limiting irrigation use (e.g. beans). The goal was utilized as the Water Board is required to protect potential use in addition to existing use. We recognize that a report is being prepared as part of the CV-SALTS effort to re-evaluate appropriate salinity objectives base don cropping patterns throughout the valley as well as hydrologic conditions. Current

drafts of the report appear to indicate 800 umhos/cm to be protective during drought conditions. Until the new report is finalized, 700 umhos/cm is our reference as most protective for potential irrigation uses.

- ***Section 8.4, Recreation (Bacteria), Figure 94b***. E. coli results for the Valley Floor Drainage Area were compared to 235 MPN/100mL which is the USEPA maximum guideline for a designated beach area. However, many of the samples collected in the Valley Floor Drainage area were collected from irrigation canals and drains which are not designated beach areas. It is illegal to trespass on or swim in Turlock Irrigation District or Modesto Irrigation District canals. The USEPA maximum guideline for infrequent body contact is 575 MPN/100mL.
  - ~~o~~Revised to read:
  - ~~o~~Further assessment utilizing USEPA guidelines is delineated in Table 21. While application of these guidelines is not an exact match for the intensity of contact or non-contact recreation at each site, nor are these guidelines adopted by the Central Valley Water Board, these guidelines do provide a framework for data comparison. Table 21 ~~identifies~~ categorizes each sample based on the ranges provided by the USEPA Guidelines ~~whether a sample collected at a specific site met USEPA guidelines~~ for contact recreation. From the table, it appears that elevated ***E. coli*** concentrations from sites in the Farmington and Valley Floor Drainage areas and Tuolumne River watershed were prevalent throughout the sampling period, including the typical recreational swim period (May 1 to October 1). However, swimming is illegal in the MID and TID owned drains and laterals. In the Stanislaus Watershed, elevated concentrations were only recorded in October. In the Merced River Watershed, elevated concentrations occurred throughout the typical recreational swim period **Figure** 93 displays distribution of all samples collected during this study, regardless of typical swim period, as compared to the USEPA Recreation Guidelines. Approximately 53% of the elevated ***E. coli*** concentrations exceeded all acceptable guidelines (>575 MPN/100ml). Each individual watershed displayed a unique distribution, as shown in figures 94a-e.

- Section 9.0, Drinking Water/Municipal Supply (Specific Conductance (salt), Minerals, Total Organic Carbon (TOC, Trace Elements, Bacteria). The paragraph states that the presence of E. coli in most samples indicates possible presence of pathogens and a requirement of treatment prior to use for municipal supply. This is a moot point as the EPA Surface

Water Treatment Rule requires disinfection (treatment) for all surface water that will be utilized for municipal purposes).

- ~~o~~Revised to read:
- ~~o~~Drinking Water/Municipal Supply (Specific Conductance (salt), Minerals, Total Organic Carbon (TOC), Trace Elements, Bacteria): Overall, water quality in the Eastside Basin generally met municipal and domestic supply objectives of goals. Sporadically, there were elevated constituent levels, dependant on the site and season. Trace elements were generally within water quality goals and objectives, with specific sites having high concentrations of certain elements (elevated cadmium at Woods Creek at Mill Villa Drive and elevated arsenic at Littlejohn's Creek at Sonora Road). The high percent of elevated TOC concentrations (43% of samples collected) makes TOC the highest potential drinking water concern in the Eastside Basin, especially in the drainage areas and lower watershed tributaries. ***E. coli*** presence in most samples analyzed indicates possible presence of pathogens and a requirement of treatment prior to use for municipal supply, as required by the EPA Surface Water Treatment Rule, which requires public water systems that use surface water or groundwater under the direct influence of surface water and serve at least 10,000 people to disinfection water that will be used for municipal purposes.

- ***Appendix A_5_Tuolumne, Site ID#s TUO203&TUO204***. Description of the water source for the Tuolumne River says that the river flows through the Stanislaus National Forest valley and into Don Pedro Reservoir. The work "valley" needs to be removed.
  - ~~o~~Revised to read:
  - ~~o~~The Tuolumne River originates from Mount Lyell within the easternmost region of Yosemite National Park. It flows through the Stanislaus National Forest ~~valley~~ and into Don Pedro Reservoir. This site was chosen as representative of pristine waters above the inlet to Don Pedro Lake. The site was removed due to access difficulties and safety issues. The site was replaced as a representative site for the upper watershed by TUO207 and TUO209.

- ***Appendix A_5_Tuolumne, Site ID #STC210***. Description of the water source states that the Old La Grange Bridge is approximately 5 miles downstream of the La Grange Dam. The actual distance is approximately 1.5 miles.
  - ~~-~~Revised to read:
  - ~~-~~Tuolumne River at Old La Grange Bridge is approximately 1.5 miles downstream of the La Grange Dam. La Grange Dam and New Don

Pedro Dam regulate the flow of the Tuolumne River as it drains from the upperwatershed. Approximately one mile upstream of La Grange, the Tuolumne is diverted at the La Grange Dam into supply canals for Modesto Irrigation District and Tuolumne Irrigation District. No major inflows occur between Don Pedro and the sampling site.

- ***Appendix A_5_Tuolumne, Site ID #STC205&STC216***. The description of the water source for both sites states that the sites lie approximately 3 miles downstream of sewage disposal ponds. The sites are approximately 7 miles downstream of Hughson's sewage disposal ponds. However, the only ponds within 3 miles of the sites are the City of Modesto sewage ponds, located approximately 3 river miles downstream.
  - ~~o~~Revised to read (STC205):
  - ~~o~~Tuolumne River at Mancini Park is located within the ~~c~~City of Modesto, and was included as a site upstream of the confluence of Tuolumne River and Dry Creek. During a storm event, the stairway leading to the site was washed away, resulting in sampling at this site being discontinued and replaced by Tuolumne river at Legion Park (STC216), less than half a mile upstream of STC205 on the north side of the River. The City of Modesto has two stormwater outfalls to the Tuolumne River at Mancini Park and approximately four stormwater outfalls to the Tuolumne River at Legion Park. ~~This site is approximately 6 miles downstream of Hughson's sewage disposal well, 3 miles downstream of sewage disposal ponds, and 1 mile downstream of the~~The Modesto Airport is approximately 1 mile upstream of the Mancini Park sampling site. ~~During a storm event, the stairway leading to the site was washed away, resulting in sampling at this site being discontinued and replaced by Tuolumne River at Legion Park (STC216), less than half a mile upstream of STC205 on the north side of the River.~~

  - Revised to read (STC216):
  - ~~o~~Tuolumne River at Legion Park is located within the City of Modesto, and was include as a site upstream of the confluence of the Tuolumne River and Dry Creek. During a storm event, the stairway leading to the site was washed away, resulting in sampling at this site being discontinued and replaced by Tuolumne river at Legion Park (STC216), less than half a mile upstream of STC205 on the north side of the River. The City of Modesto has two stormwater outfalls to the Tuolumne River at Mancini Park and approximately four stormwater outfalls to the Tuolumne River at Legion Park. The Modesto Airport is approximately 1 mile upstream of the Mancini Park sampling site. Picnicking, jogging, and other recreational

activities are prevalent at this site. The area is characterized by sandy banks ~~and riverbeds and represents an upstream comparison of the Tuolumne River to Dry Creek. Sewage disposal ponds are located approximately 3 miles upstream of the park along the north side of the Tuolumne River~~.

~~o~~

- ***Appendix A_5_Tuolumne, Site ID #STC206***. The discussion of Dry Creek source water should contain a description of City of Modesto storm water discharges to the creek.

  ~~o~~Revised to read:

  Dry Creek is a free flowing, ephemeral stream originating in the Sierra Foothills and is dominated by agricultural return flows from an MID operation spill between April and November and agricultural drains through the foothill area. Additionally, the City of Modesto storm drain system includes approximately 30 outfalls to Dry Creek, with approximately 18 downstream of the sampling site. Approximately 13 stormwater outfalls are located on the Tuolumne River between the Legion Park and Audie Peeples sampling sites (Waste Discharge Requirement, NPDES No. CAS083526, Order No. R5-2008-0092). Surface water discharges occur generally in the older areas of the City or those areas immediately adjacent to the Tuolumne River, Dry Creek or irrigation canals. Twenty percent of the City's storm water discharges flow into either the Tuolumne River or Dry Creek.

  ~~o~~This creek has carried tremendous winter flood flows in the past and has been extensively rechannelized and leveed along its lower 12-mile reach as it passes through the City of Modesto before discharging to the Tuolumne River.

  ~~o~~The confluence of Dry Creek with the Tuolumne River is structured to be a mixing box. Depending on a combination of flow data from Tuolumne River at La Grange, Dry Creek at Clause Road, and Tuolumne River at 9~~th~~ Street Bridge, this structure can cause Dry Creek flow to come to a stop, or even allow the Tuolumne River to backflow up the Dry Creek channel, provided the ratio of Tuolumne River flow to Dry Creek flow is high enough. This did not occur during the period of this study.

- ***Appendix A_5_Tuolumne, Site ID #STC513***. The site description states that the site is located approximately 7 miles upstream from the confluence of the San Joaquin River. The distance is closer to 3.5 miles.

  ~~o~~Revised to read:

  ~~o~~The site is located eight miles west of Modesto along Shiloh Road, approximately ~~seven~~ 3.5 miles upstream of the confluence with the San Joaquin River. Samples were collected on the left bank of the

Tuolumne River, under the Shiloh Road Bridge. The site can be reached following the sign for Shiloh fishing access on the south side of the Shiloh Road Bridge.

- ***Appendix A_3_VJ, Site IDS #STC208, #MER201, and MER203***. The description of the water source states that the water is filtered through Turlock Lake. Water is not filtered in Turlock Lake. Additionally, the description states that TID canal water is used for municipal uses. TID's canal system does not convey water for municipal purposes with the exception of the first 1.6 miles of the canal above the Stanislaus County community of La Grange (upstream of Turlock Lake). Flows in that stretch of the Upper Main Canal consist entirely of high quality Tuolumne River water. There are no other municipal uses of TID canal water, nor are there plans to use the canal for that purpose.
  - ~~o~~Revised to read:
  - ~~o~~The Turlock Irrigation District originates at La Grange Dam, where water from the Tuolumne River is channeled through the Turlock Main Canal~~. After filtering through~~ to Turlock Lake. Downstream of Turlock Lake, TID's water is channeled through a system of laterals for agricultural ~~and municipal~~ use, and brought back to the San Joaquin River through its drains.

- ***Appendix A_3_VF, Site ID #STC501***. The description of the water source states that the Harding Drain is an earth lined channel, carrying urban storm runoff, wastewater treatment plan effluence (sic.), agricultural tail and tile water, and is an operation spill that drains 4250 acres. The drain itself is not an operation spill but does carry operation spill water from four TID canals. Additionally the Harding Drain can collect drainage from approximately 50,000 to 95,000 acres of agricultural and urban areas, depending on how flows are routed through the TID canal system.
  - ~~o~~Revised to read:
  - ~~o~~Harding Drain is an earth lined ~~channel, carrying urban storm runoff, wastewater treatment plant effluence, agricultural tail and tile water~~channel that can carry operational spill water from four TID canals, ~~and is an operational spill, that~~ for a combined drainage~~s~~ of approximately 50,000 to 95,000~~4250~~ acres from agricultural and urban areas, depending on how flows are routed through the TID canal system. This site is 303(d) listed for ammonia, chlorpyrifos, diazinon, and unknown toxicity. As a long term monitoring site, monthly sampling was augmented during this study.

- ***Appendix A_3_VF, Site ID MERC201***. The description of the site states that the site is located approximately seven miles west of Turlock.. The site is actually located approximately nine miles southwest of Turlock.

The site is labeled as TID Lateral 6&7. Technically, the sampling site is actually the Lateral 6&7 Drain.

- ~~o~~Site name changed and Water Source revised to read:
- ~~o~~Water for the Turlock Irrigation District originates at La Grange Dam, where water from the Tuolumne River is channeled through the Turlock Main Canal~~. After filtering through~~ to Turlock Lake. Downstream of Turlock Lake, TID's water is channeled through a system of laterals for agricultural ~~and municipal~~ use, and brought back to the San Joaquin River through its drains. This site represents ~~a TID Lateral, carrying~~ a mixture of supply and drainage from TID Laterals. The site discharges into the San Joaquin River at a point ¾ mile downstream of the confluence of Laterals 6 and 7.

- ***Appendix A_3_VF, Site ID #MER203***. The description of the site states that the site is located approximately seven miles west of Turlock. The site, Lateral 7 at Central Avenue, is located approximately nine miles southwest of Turlock.
  - ~~o~~Revised to read:
  - ~~o~~This site is located approximately ~~seven~~ nine miles west of Turlock, and two miles north of Hatfield Park. From the town of Turlock on Highway 99, take Highway 165 south to Williams Avenue. Turn west and drive five miles to Mitchell Road; turn south. Turn northwest on Turner Road and northeast on Central. Samples were collected from Lateral 7 near the gate.